

## 1993 ANNUAL EXHIBITION

### Imperial College, London SW7—30 October 1993

The following account of exhibits has been compiled by R. D. G. Barrington (British Butterflies), B. K. West (British Macrolepidoptera), J. M. Chalmers-Hunt (British Microlepidoptera), B. Goater (Foreign Lepidoptera), P. J. Chandler (Diptera), P. J. Hodge (Coleoptera), P. Kirby (Hemiptera), A. J. Halstead (Hymenoptera and other orders) and R. Dyke (Illustrations). The photographs for the two colour plates were taken by D. E. Wilson.

#### BRITISH BUTTERFLIES

BAILEY, K. E. J.—(1) A series of *Pararge aegeria* L. ab. *cockaynei* Goodson with heavily smudged markings, bred in i–ii.1993, included some extreme forms. This aberration has an environmental rather than genetic basis, occurring when overwintering larvae complete their development early. An example of the aberration was illustrated in *Br. J. Ent. Nat. Hist.* 1991; 4: Plate I. A range of aberrations from the exhibitor's continuing work with the effects of temperature and photoperiod shocks to late larvae and early pupae. Included were extreme melanic forms of *Polygonia c-album* L. ab. *reichstettensis* Fettig, *Aglais urticae* L. ab. *semiichneusoides* Pronin, *Vanessa atalanta* L. ab. *klemensiewiczi* Schille and *Nymphalis polychloros* L. ab. *testudo* Esper. One specimen of *testudo* was of a very unusual form with greatly reduced dark markings. Minor forms of *Argynnis adippe* D. & S. had the hindwing marginal spots confluent (extreme cold of  $-14^{\circ}\text{C}$  was required at the pupal stage to induce this variation).

A wild-captured *Boloria selene* D. & S. ab. *pittionii* Nitsche from which ova were obtained, and a captured aberration of *Boloria euphrosyne* L. with confluent hindwings. After years of trying, Mr Bailey has succeeded in producing aberrations of *B. euphrosyne*. These occurred when the larvae were photoperiod-stressed, and the pupae were then cold-shocked. One specimen was an extreme form with the underside obsolete and with heavy silver markings.

(2) A quite beautiful series of extreme forms of *Eurodryas aurinia* Rott. ab. *sebalus* Schultz (Plate I, Fig. 5). These were the result of cold-shocked pupae that were bred

#### Plate I. ANNUAL EXHIBITION 1993

1	2	3
4	5	6
7	8	9
10	12	
11	13	
14	15	

- 1: *Lysandra coridon* ab. *discreta-postradiata*, Dorset, 30.vii.1993, S. J. Rook.
- 2: *Polyommatus icarus* melanic underside, bred, 1993, L. D. Young.
- 3: *Polyommatus icarus* ab. *radiata*, bred, R. Revels.
- 4: *Thymelicus sylvestris* ab. *intermedia*, 7.vii.1992, M. Callow.
- 5: *Eurodryas aurinia* ab. *sebalus*, bred (cold shock), K. E. J. Bailey.
- 6: *Polyommatus icarus* melanic ab., Isle of Skye, 27.vi.1993, W. G. Tremewan.
- 7: *Quercusia quercus* ab. *latefasciata*, bred, 27.vi.1993, A. M. Jones.
- 8: *Acinia corniculata*, Chailey Common, 19.viii.1993, P. J. Hodge.
- 9: *Maniola jurtina* ab. *excessa*, bred, Dorset, 1993, R. D. G. Barrington.
- 10 & 11: *Victrix agenjo*, Valladolid, Spain, B. Goater; 10 male, 11 female.
- 12 & 13: New dudgeonid species, Borneo, G. Ping & G. S. Robinson; 12 male, 13 female.
- 14: *Sataspes infernalis*, Hong Kong, 1993, P. Waring.
- 15: *Lymantria dispar*, bilateral gynandromorph, bred US Dept. Agric., R. D. G. Barrington.

Photo: D. E. Wilson

from aberrant parents also produced from cold-shocked pupae. The present brood contained specimens considerably more aberrant than the parents (perhaps suggesting that selection for a strain more receptive to cold-shocks is possible). They compared with some very extreme wild-captured forms from Devon in the 1940s, illustrated in the *Colour identification guide to butterflies of the British Isles*, Viking, 1973.

BARRINGTON, R. D. G.—Two generations from a female *Maniola jurtina* L. ab. *excessa* Leeds taken in Dorset, vii.1991. The original parent had two strong extra black spots on each forewing below the apical spot. The  $F_1$  of 31 insects was a graded series from type to good examples of *excessa*. The  $F_2$  generation (from  $F_1$  *excessa* parents) of 19 insects was again graded from type through to an extreme female example of *excessa* having two very heavy extra pupilled spots on each forewing, and a spot at the anal angle of the upperside hindwing (Plate I, Fig. 9). This is a multifactorial/polygenic form (i.e. controlled by a number of genes having an additive effect). Wild-captured aberrations included a male *Lysandra coridon* Poda ab. *ultrafowleri-margino* B.&L., *Thymelicus sylvestris* Poda ab. *pallida* Tutt, (a female with white ground colour) and a female *Anthocharis cardamines* L. with a streaked discal spot.

CALLOW M. A pair of *Argynnis paphia* L. ab. *confluens* Spuler (2 and 3.vii.1993) and two extremes of *Ladoga camilla* L. ab. *obliterae* Robson & Gardner (vi/vii.1993). A strongly marked male *Lysandra coridon* Poda ab. *striata* Tutt (Dorset, 1993) with a single streak from a submarginal spot through the discoidal spot to the basal spot on each forewing. A good male *T. sylvestris* ab. *intermedia* Frohawk (Plate I, Fig. 4) with yellow-white groundcolour taken on 7.vii.1992 from among many hundreds observed.

DENNIS, R. C.—A breeding experiment with *Pyronia tithonus* L. from an original parent transitional to ab. *caeca* Tutt (an example of *caeca* taken by the exhibitor was illustrated in *Br. J. Ent. Nat. Hist.* 1991; 4: Plate I). The  $F_1$  of 4 females and 39 males contained 22% aberrations. The  $F_2$  of 15 females and 23 males contained 51% aberrations. It is probable that this is a dominant form, although the ratios of aberrations to type (the original parent being assumed to be heterozygous) fell short of the expected (which would be 50% aberrations and 75% aberrations in the  $F_1$  and  $F_2$  respectively). However, it is likely, given the shortage of females in both broods, that the gene has a weakening effect, hence the reduced percentages of aberrations.

Also shown were a female *Melanargia galathea* L. with a black patch on the right forewing (and deformed venation in this area), most likely caused by damage to the pupa or disease, and a female with reduced and pale markings. Two females of *Lysandra coridon* with darkened undersides and a male showing both ab. *ultrafowleri* South and ab. *caeca* Courv. Two bleached specimens of *M. jurtina* and a female example with the forewing fulvous very pale on the underside.

JONES, A. M.—A pair of melanic aberrations of *Argynnis paphia*, the male ab. *confluens* Spuler and the female a very dark ab. *ocellata* Frings. Two extreme *L. camilla* L. ab. *nigrina* Weymer and an example of the less extreme ab. *obliterae* Robson and Gardner. All of these insects were in perfect condition. The exhibitor, having noticed *camilla* pupating in the wild at a time of hot weather in early June 1993, was encouraged to search for melanic forms of both species during the flight period, with subsequent success. A fine and extreme aberration of *Quercusia quercus* L., a female bred from wild ova. The underside hindwings were ab. *latefasciata* Courv. (Plate I, Fig. 7) with broad white banding, and the dark forewings were tending towards ab. *infraobscura* Goodson. A bred gynandromorph of *Anthocharis cardamines* L. with orange on the underside of the forewings of an otherwise entirely female insect. A bred example of *Pararge aegeria* L. ab. *cockaynei* Goodson, iii.1993.

PORTER, J.—*Pieris napi* L. ab. *obsoleta* Rober (lacking dark markings) and a dark female from the Scottish Highlands. *Inachis io* L. ab. *brunnea* Reuss bred from a brood of 100 adults. A good *L. camilla* ab. *nigrina*.

*Plebejus argus* L. from five different colonies including the chalk soil of Portland, Dorset (pale undersides and thin black borders on the upperside of the males), Great Orme, North Wales (the famous ssp. *caernensis* Thompson) and from heathland, including an intersex, ab. *inaequalis* Cockayne—a female insect with strong blue scaling on the right wings. A female *Pyronia tithonus* L. ab. *crassiexcessa* Leeds. *Coenonympha tullia* Müll. ssp. *scotica* Staud abs *pallida* Osthelder and *obsoleta* Tutt (entirely lacking spots). Two female *Polyommatus icarus* Rott, one an extreme ab. *coerulea* Fuchs from the North Downs, the other a Scottish female example with bright whitish-blue hindwing margins.

REVELS, R. C.—(1) A female example of *Pararge aegeria* ab. *saturation* Cramb. from Herts., 1993, lacking pale markings on the hindwings and reduced on the forewings. A very remarkable male *Colias croceus* Geoff. aberration bred by a colleague from purchased pupae. The right forewing is completely melanic on both surfaces (but with the original pattern visible) and the upper third of the right hindwing is melanic on the underside only (figured in *Bull. Amat. Entomologists' Soc.* 1993; 52: pl.T). A male *P. icarus* ab. *radiata* Courv. bred in the F<sub>2</sub> from a similar original parent. Little else of note has appeared in the strain up to an F<sub>3</sub> of 150+ insects.

(2) A very impressive breeding experiment with *Polyommatus icarus* from an original parent ab. *discoelongata* B.&L. taken viii.1992 from a locality where ab. *radiata* has occurred. The F<sub>1</sub> of 40 insects was mostly typical although a few specimens were *discoelongata* on the forewings, and, in one male example, on all wings. This male was paired with a *discoelongata* female producing an F<sub>2</sub> of 24 males and 26 females in vii/viii.1993; 5 males and 9 females were *radiata* on all wings and another 5 of each sex were transitional forms. The remainder of the brood was typical or nearly so. Pairings between *radiata* adults produced an F<sub>3</sub> of 91 insects in ix.1993. This contained a graded range of aberrations from type (3 of each sex), through transitional forms (20 insects) to full *radiata* (Plate I, Fig. 3) (30 males and 35 females). Ova have been obtained to continue the strain.

Breeding over many years by L. D. Young has shown that *discoelongata* is inherited as a multifactorial/polygenic form and when inbred can produce *radiata*. The present strain required many fewer generations to produce full *radiata*, and continued inbreeding by the exhibitor will hopefully indicate whether a different gene system is in operation.

(3) F<sub>1</sub> and F<sub>2</sub> broods from an extreme aberration of *Pyronia tithonus* L. with very broad forewing borders and lacking the hindwing fulvous. This experiment has shown this to be a dominant form with a weakening effect on the insects. This aberration was figured in *Proc. Trans. Br. Ent. Nat. Hist. Soc.* 1985; 18: Plate 1.

ROBERTSON, T. S.—An unusual form of *Aglaia urticae* L. Finchampstead, Berks., 24.viii.1993, with the basal two forewing costal black markings joined. Usually in aberrant *urticae* it is the sub-basal and distal costal markings that coalesce.

ROOK, S. J.—Two aberrations of *Lysandra coridon* Poda from Dorset in 1993. One was ab. *discreta-postradiata* B.&L. (Plate I, Fig. 1), the second a female with strong blue scaling on the upperside of all wings, bearing similarities to ab. *semisyngrapha* Tutt.

RUSSWURM, A. D. A. & MIDDLETON, H. G. M.—A female *Maniola jurtina* L. with very bright markings and an enlarged apical spot, having the appearance of an extreme form of ssp. *cassiteridum* Graves (Scilly Isles), from Boldre, Hants, 3.viii.1993.

TEBBUT, P.—A range of aberrations of *Aphantopus hyperantus* L. showing variation in spotting from ab. *arete* Muller to ab. *lanceolata* Shipp, and an unusual female underside aberration with whitish scaling extending distally from all spots. *Pyronia tithonus* L., males abs. *antipallidula* Leeds and *antiparvipuncta* Leeds. Two bred *M. jurtina* L. were shown. One was a male ab. *commaculo* Leeds (ground colour on the upperside marbled and pale markings—a scale defect) and a female ab. *pauper* Verity (with reduced upperside fulvous). *Aricia agestis* D. & S. ab. *pallidior* Ober (pale lunules). Two female aberrations of *Pieris napi*, one being ab. *fasciata* Tutt and *nigropunctata* Lamb. and the other ab. *deleta* Strand and *unimacula* Dziursynski (reduced markings).

TREMEWAN, W. G.—A fine aberration of *P. icarus* Rott. (Plate I, Fig. 6), from the Isle of Skye (27.vi.1993). This was an extreme melanic male on both surfaces, bearing a resemblance to the melanic male *L. coridon* exhibited at the 1992 Exhibition by G. D. Trebilcock and illustrated in *Br. J. Ent. Nat. Hist.* 1993; 6: Plate II (although this *coridon* form was a mosaic with type coloration also).

TUBBS, R. S.—A drawer of aberrations of *P. tithonus* including a fine series of ab. *mincki* Seebold (ground colour yellow-white) bred in the F<sub>2</sub> from an original *mincki* parent taken in Wilts by R. C. Revels in 1981. It proved to be a recessive form. Five F<sub>2</sub> specimens of the very dark aberration also exhibited by R. C. Revels, and bred from ova supplied by him. Fifteen specimens of ab. *excessa* Leeds (extra forewing spotting) from Minehead, 1952. R. C. Revels has shown this to be a multifactorial/polygenic form as is the corresponding form in *M. jurtina*, as illustrated in the exhibit of R. D. G. Barrington.

WARNE, B. J.—A male *Maniola jurtina* L. ab. *partimtransformis* Leeds having the left side strongly bleached (I.o.W., 23.vi.1993) and a female *Q. quercus* taken at m.v. light (I.o.W., 18.vii.1993).

WINOKUR, L.—A large exhibit of breeding experiments with *Pararge aegeria* L. carried out at Reading University, funded by the Natural Environmental Research Council (UK).

(1) Breeding experiments showed an increase in wing size from south to north (using stocks from Salisbury, Wilts. (ssp. *tircis* Godart), North Wales (ssp. *tircis*) and N-W Scotland (ssp. *oblita* Harrison)) when stock was reared under similar conditions. Within each population, stock reared at lower temperatures produced larger adults.

(2) An aberration from two North Wales localities with an extra forewing ocellus in space 2. It is a recessive form.

(3) Breeding experiments involving colour forms similar to ab. *cockaynei*. One conclusion was that this form can be produced artificially either by changes in daylength or in temperature.

YOUNG M.—*Lycaena phlaeas* L. ab. *alba* Tutt (Rossie Moor, Angus, 4.vii.1993—donated to the exhibitor by Dr John Langmaid).

YOUNG, L. D.—A fine display of aberrations of *Polyommatus icarus* Rott. being a condensed version of the huge breeding experiment with abs *discoelongata* B.&L. and *basielongata* B.&L., the yearly results of which have been displayed at the Annual Exhibition since 1985. The present exhibit showed four specimens from each generation after the two aberrations were crossed in 1986. The development through to ab. *antiradiata* with enlarged hindwing spots in the later generations could be seen very clearly. The abs *retrojuncta* B.&L. and *limbojuncta* Courv. have appeared at random throughout the experiment. Also shown was a group of the most extreme female upperside forms that have occurred, including some striking blue aberrations. Nine specimens were shown from the last year's breeding, including some very good

*antiradiata* with elongated hindwing spots, and a rare underside melanic form of the male (Plate I, Fig. 2).

#### BRITISH MACROLEPIDOPTERA

AGASSIZ, D. J. L.—On behalf of J. Hale the second *Athetis hospes* Freyer (Plate II, Fig. 4) for the British Isles, from St Agnes, Isles of Scilly, 14.ix.1993.

ALEXANDER, K. & FOSTER, A.—From Dolmelynlyn Woods, Mer.: *Venusia cambrica* Curt. and *Lampropteryx oregiata* Metcalf; from Cregennen Bog, Mer.: *Xylena vetusta* Hübn. bred from larva found on *Myrica gale* L.

BAKER, P.—*Pseudopanthera macularia* L. ab. with greatly reduced maculation (Plate II, Fig. 15), Virginia Water, Surrey, 12.v.1993; *Euproctis similis* Fuess., with submarginal spotting, Thorpe, Surrey, 13.vii.1990; *Eupithecia virgaureata* Doubl., Lizard, Cornwall, bred from larvae found commonly on ragwort, but scarce on *Solidago*; a dark banded *Crocallis elinguaris* L., Thorpe, 22.vii.1993 and *Thera obeliscata* Hübn. with a diffuse median fascia and inner margin of reddish colour, Thorpe, 9.v.1993.

BROTHERIDGE, D.—Exhibit included species rare in Wiltshire—*Lampropteryx oregiata* Metc., *Idaea vulpinaria* H.-S., *Amphipoea fucosa* Freyer, *Chloroclysta siterata* Hufn., *Moma alpium* Osb., *Coenobia rufa* Haw., *Heliothis armigera* Hübn., *H. virescens* Hufn. and *Trichoplusia ni* Hübn.

CLANCY, S.—Migrants taken at Dungeness, Kent, in 1993 included the second British record of *Harpyia milhauseri* F. 24.v; *Hyles euphorbiae* L., 12.viii; *Nola aerugula* Hübn., 2.vii; *Photedes extrema* Hübn., the second and third county records, 1.vi and 10.vi; *Ochroleptura leucogaster* Freyer, the fourth British record, 11.x; *Agrotis trux* Hübn., first county record, 10.ix; *Trigonophora flammea* Esp. 12.x; *Macdunnoughia confusa* Steph., 21.ix; and *Chrysodeixis chalcites* Esp. with enlarged gamma mark (Plate II, Fig. 8), 19.viii. Aberrations from Dungeness in 1993 included an albino *Tyria jacobaeae* L.; *Hadena perplexa* D. & S. with strong ante- and post-median lines (Plate II, Fig. 10), 30.iv; *Xanthorhoe montanata* D. & S. with reduced dark scaling on one forewing, 6.vi. From elsewhere, *Euproctis similis* Fuess. with increased black markings on forewings (Plate II, Fig. 9), Tilshead, Wilts., 29.vii; *Ematurga atomaria* L. with reduced markings, Ashdown Forest, Sussex, 22.v; a dark female *Lasiocampa quercus* L. Hamstreet, Kent, 3.vii; an extreme melanic *Acronicta alni* L., Beckley, Sussex, 12.v; a richly coloured *Cosmia trapezina* L. ab. *rufa* Tutt from Hamstreet, 14.vii, and from the same locality two bred *Colocasia coryli* L. without the basal dark area.

CLARKE, C. M.—About 13 000 back-cross larvae of *Callimorpha dominula* L. (*medionigra* Cockayne × typical) were introduced from Cothill, Oxon. to the Wirral Way, Merseyside in 1961. The colony was rediscovered in June 1988 when a male *bimacula* Cockayne came to m.v. light, since when the colony has been studied, during which time the proportions of the three forms—typical, *medionigra* and *bimacula*—have remained in Hardy-Weinberg equilibrium with *medionigra* between 20 and 25%. This contrasts with Cothill where this form is now only about 2%. Two sets of imagines were exhibited, the first (1989) bred from last instar larvae from the Wirral Way, together with broods using these as parents, the second imagines bred from 1993 last instar larvae from the Wirral Way.

CLARKE, J. M.—The exhibit included specimens taken or bred in 1993: *Cossus cossus* L., larvae found in birch, but reared on beetroot; bred *Bembecia chrysidiformis* Esp. and bred from birch *Synanthedon sphecoformis* D. & S., Bartley Heath, Hants; an unusually pale female *Macrothylacia rubi* L. from Hoads Wood, Kent; a bred

*Lasiocampa quercus callunae* Palmer ab. *olivacea* Tutt, Grantown-on-Spey, Moray; bred *Xestia rhomboidea* Esp. from Levisham, Yorks.; *Lomaspilis marginata* L. with brownish suffusion, Lingfield, Surrey; *Diarsia mendica* F. with enlarged and joined stigmata, East Grinstead, Sussex, and *Lycia zonaria* D. & S. from larvae found on Iona.

COLENUTT, S.—From Chale Green, I.o.W., *Lymantria dispar* L., 4.ix.1993 and a very dark *Agrotis clavis* Hufn.

COLLINS, G.—Series of *Eilema complana* L. from Surrey and Suffolk, and *E. sericea* Gregson from Shropshire for comparison; also other species of footman to show variation, including *E. griseola* Hübn and f. *stramineola* Doubl.; *E. deplana* Esp. ab. *plumbea* Cockayne; *Mitochrysa miniata* Forst. ab. *flava* Bigneau; *Cybosia mesomella* L. ab. *flava* de Graaf.

COOK, R.—Included were bred series of *Hypena obsitalis* Hübn., Torbay, 1993; *Paradarisa consonaria* Hübn. ab. *waiensis* Richardson, a bred series from Cinderford, Forest of Dean; *Lycia zonaria* D. & S. bred from Iona, and *Synanthedon scoliaeformis* Borkh. bred from Rannoch, Perthshire, 1993.

CORLEY, M.—From Bladon Heath, Oxon. 22.vii.1993 *Eupithecia expallidata* Doubl., a new county record; *Solidago* is absent from the site, but *Senecio jacobaea* L. plentiful. *Amphipyra berbera* Rungs, a curious ab. lacking the copper colour on hindwings, 22.vii.1993.

DYER, J.—*Noctua janthe* Borkh. from Britain and Spain, and *N. janthina* D. & S. from Cyprus and Spain for comparison.

ELLIOTT, B.—1993 specimens included a bred series of *Agrochola haematidea* Dup. from Sussex; *Hypena obsitalis* Hübn. from S. Devon; *Acrionicta euphorbiae myricae* Guen. from Co. Galway; *Hadena caesia mananii* Gregson from Co. Clare; *Euphyia biangulata* Haw. from Dorset; *Eupithecia fraxinata* Crewe from Derbyshire and *Eumichtis lichenaea scillonea* Richardson from the Scilly Isles.

FORDER, P.—*Odontognophos dumetata* Treits., the original two specimens of subspecies *hibernica* Forder taken in Co. Clare, vii.1991 (Plate II, Fig. 12). Photographs of the moth in natural surroundings showed how well camouflaged it is when resting on the local limestone. Colour photographs of continental specimens, which are brown, not grey, were also exhibited.

HACKETT, D.—*Synanthedon vespiformis* (L.) reared from oak bark samples taken 5.v.1993. Queen's Woods, N. London, em. 16.vii.1993.

HALL, N.—Specimens of *Euxoa tritici* L. from Dorset which had been investigated to determine if any of them were *E. crypta* Dadd, a species with a known range from Spain to Finland, but without positive conclusion.

HART, C.—From Buckland, Surrey, rarities included *Scotopteryx rubidata* D. & S., 29.vi.1992; *Chloroclysta siterata* Hufn., 27.ix.1992 and 27.x.1993; *Chesias rufata* F., 24.iv.1993; *Xestia rhomboidea* Esp., 19.viii.92; *Abrostola trigemina* Werneb., 22.vi.93; *Macdunnoughia confusa* Steph., 20.viii.92, and *Hepialus fusconebulosa* de Geer, 8.vi.1993. From elsewhere moths included *Orthonama obstipata* F., Gunwalloe, Cornwall, 14.ix.1993; *Mythimna loreyi* Dup. and *Trichoplusia ni* Hübn. from St Keverne, Cornwall, 17.ix.1992.

HAYWARD, R.—*Agrotis trux lunigera* Steph., Slough, 18.vii.1992, a most unusual record for so far inland. A female *Diaphora mendica* Clerck taken at m.v. light, Slough, 7.v.1993. At Slough, and other places to the immediate west of London some species are darker than usual. From Slough the following species were shown to illustrate this—*Cyclophora punctaria* L., *Idaea seriata* Schr., *Hydriomena impluviata* D. & S., *Eupithecia assimolata* Doubl., *Menophra abruptaria* Thunb., *Peribatodes rhomboidaria* D. & S. ab. *perfumaria* Newman, *Pterostoma palpina* Clerck, *Xestia*

*sexstrigata* Haw., *Lithophane leautieri* Boisd., *Apamea anceps* D.&S. and *Dryobotodes eremita* F. ab. *nigra* Cockayne.

HENWOOD, B.—A minute *Epirrhoe alternata* Müll. from Devon.

HOLLAND, N.—*Eupithecia simpliciat*a Haw. from I.o.W.

JENKINS, A.—From the Breckland: *Cyclophora porata* L., *Lithostege griseata* D.&S. and *Sesia apiformis* Clerck. From the Lake District: *Eustroma reticulata* D.&S.; from South Wales: *Eriopygodes imbecilla* F. and from North Wales: *Lycia zonaria* D.&S.

KNILL-JONES, S.—A comprehensive exhibit of mainly scarce species taken in the I.o.W. in 1993; also several aberrations. From Freshwater: *Euplagia quadripunctaria* Poda, 19.viii; *Chilodes maritimus* Tausch., 5.vii; *Euproctis chrysorrhoea* L. ab. *punctella* Strand; a uniformly dark brown *Diarsia rubi* View., 4.ix; *Agrotis cinerea* D.&S. 24.v; *Acrionicta alni* L. 28.v; *Spaelotis ravida* D.&S. 13.vii; *Cucullia chamomillae* D.&S. and a pale yellow *Selenia dentaria* F. 4.vii. From Grasmere: *Lycia hirtaria* Clerck, 23.iv; *Serraca punctinalis* Scop. 26.v; *Odontotia carmelita* Esp.(3) 22.iv, a new vice-county record; *Drymonia dodonaea* D.&S. 12.v; *Tethea* or D.&S. 12.v; *Philereme vetulata* D.&S. 1.vii and 2.vii; *Semiiothisa alternaria* Hübn. and an extreme ab. of *Trichopteryx carpinata* Borkh. From elsewhere, a bred series of *Lithophane semibrunnea* Haw. from Binstead; *Plagodis pulveraria* L. from Havenstreet, 10.v. and 12.v and *Euchoeca nebulata* Scop. Arreton, 23.v.

KOLAJ, A.—Exhibit included, from Coventry, yellow forms of *Cryphia domestica* Hufn.; *Noctua comes* Hübn. ab. *sagittifer* Cockayne, 30.vii.1992; *Agriopus marginaria* F. ab. *fuscata* Mosley; an aberration of *Lomographa temerata* D.&S. and *Odontopera bidentata* Clerck ab. *nigra* Prout. From West Sussex: *Heliothis peltigera* D.&S. bred from larvae found on *Senecio viscosus* L.; *Lycia zonaria* D.&S. from Conway, North Wales and *Drymonia ruficornis* Hufn. with extra white markings from Grendon, War.

LANGMAID, J. R.—*Zygaena lonicerae* Schev. ab. *centripuncta* Tutt, Brown-down, Hants, 18.vi.1993; *Opisthograptis luteolata* L. ab. *ruficosta* Lempke, Southsea, Hants, 30.vii.1993 and *Autographa gamma* L. ab. with 'Y' mark obsolete on right forewing, and replaced with small curved dash on left forewing, Southsea, 17.v.1993.

LANGMAID, J. R. & AGASSIZ, D.—From St Martins, the Scilly Isles: *Agrotis puta insula* Rich., 21.ix.1993; *Eumnictis lichenea scillonea* Rich., 20.ix and *Thalophila matura* Hufn. F. *trescoensis* Rich., 18.ix.1993.

MACNULTY, B.—A selection of moths from the Gower Peninsula of which the most noteworthy was *Lasiocampa trifolii* D.&S. Other species included *Furcula bicuspid* Borkh., *F. bifida* Brahm, *L. quercus* L., *Philudoria potatoria* L., *Polyploca ridens* F. and *Cymatophorima diluta* D.&S.

MCCORMICK, R. & PENNEY, C.—Species taken in Derbyshire, late August 1993 included *Antitype chi* L., both ab. *olivacea* Steph. and ab. *nigrescens* Tutt, *Amphipoea lucens* Freyer, *Standfussiana lucernea* L. and *Epirrita filigrammaria* H.-S. *Drepana curvatula* Borkh. from Pagham, Sussex; *Pelosia obtusa* H.-S. from Catfield, Norfolk; a pink form of *Orthosia gracilis* D.&S. from Mull and *Xanthorhoe fluctuata* L. f. *thules* Prout from Chelmsford, Essex.

MENZIES, I.—Three species of *Acherontia*—*A. atropos* L. from Braunton, Devon, viii.1944, and for comparison: *A. lachesis* F. from South India and *A. styx* Westw. from Qatar.

MIDDLETON, H. & SCANES, J.—From the Norfolk Broads: *Photodes brevilinea* Fenn, *P. pygmina* Haw. *Pelosia obtusa* H.-S., *P. muscerda* Hufn., *Coenobia rufa* Haw. and *Phragmataecia castaneae* Hübn. From the Norfolk coast: *Photodes elymi* Treits. and *Mythimna litoralis* Curt. and from north Surrey: *Dicycla oo* L., including ab. *renago* Haw. All were taken in 1993.

NATURAL HISTORY MUSEUM—Two display boards describing the scope and origins of the Rothschild-Cockayne-Kettlewell Collection and the National Collection of Lepidoptera. The Cockayne Trust and the Cockayne Research Fellowship were explained. Several drawers of the National Collection were exhibited.

OWEN, D.—Part of a random sample of *Callimorpha dominula* L. from Cothill, Oxon. in 1992, when there was a population explosion. It included no *bimacula* Cockayne (none seen since 1959), one *medionigra* Cockayne (heterozygote) and two approaching this, and the remainder homozygous *dominula*. Recent experimental work has shown that the expression of *medionigra* is affected by temperature, many more *medionigra* being produced in high, constant temperatures, making Ford's predictions invalid. Also shown was a photograph of a *C. dominula* larva feeding on a spore-bearing cone of *Equisetum telmateia*; apparently there being only one previous record of the larva of a moth feeding on *Equisetum* in Britain.

PARSONS, M.—*Mythimna turca* L. from Richmond Park, Surrey, 3.vii.1993. Also a dark *Lymantria monacha* L. from the same locality, 16.vii.1993.

PARTRIDGE, R.—Species taken near Ely which are uncommon in East Cambs.; they included *Cossus cossus* L.; *Synanthedon formicaeformis* Esp., 14.viii.1993 on flowers of *Mentha* × *rotundifolia* (L.) Hudson; *Hydriomena impluviata* D. & S., 10.vii.1993; *Rheumaptera cervinalis* Scop., 11.iv.1991; *Semiothisa wauaria* L., 16.vii.1993; *Hyloicus pinastri* L., 17.vii.1993; *Rhyacia simulans* Hufn., 26.ix.1991; *Lithophane semibrunnea* Haw., 5.x.1991; *L. ornitopus* Hufn., 7.x.90; *Dryobotodes eremita* F., 2.ix.1992; *Chilodes maritimus* Tausch., 29.vi.1992; *Heliothis virescens* Hufn., 15.viii.1993, possibly a first county record; *Earias clorana* L., 25.v.1992 and *Nycteola revayana* Scop., 17.iii.1992.

PEACH, D.—*Scopula marginepuncta* Goeze from Ryde, I.o.W., 22.v.1993, with two transverse black lines on a pale yellow background (Plate II, Fig. 7), and from Havenstreet, I.o.W., 16.vii.1993, *Idaea biselata* Hufn. ab. *fimbriolata* Steph.

PHILLIPS, J.—Taken in 1993, *Photodes brevilinea* Fenn ab. *sinelinea* Farn from Barton Broad, Norfolk; *Eilema pygmaeola* Doubl., Winterton Dunes, Norfolk; *Polia bombycina* Hufn., Tilshead, Wilts. and *Adscita statice* L. from Odiham Common, Hants.

PICKLES, A. J. & C. T.—*Acronicta psi* L. ab. *virga* Tutt from Cradley Heath, Staffs., 2.vii.1993.

PORTER, J.—The first British specimen of *Athetis hospes* Freyer (Plate II, Fig. 5), Lizard, Cornwall, 26.viii.1978; *Hylaea fasciaria* L. ab. *grisearia* Fuchs; a pale *Drymonia dodonaea* D. & S.; *Arctia villica* L. ab. *ursula* Schultz from Dungeness, 13.vi.1980; *Ochropleura plecta* L. with a scale defect and *Euproctis chrysorrhoea* L. with black V-shaped markings.

ROUSE, T.—Unexpected species found in Reinden Wood, Kent, in 1992/93—*Hydrelia sylvata* D. & S., *Hepialus fusconebulosa* De Geer, *Anaplectoides prasina* D. & S. and *Ptilophora plumigera* D. & S. *Synanthedon vespiformis* L. from Blean Woods, Kent; *S. formicaeformis* Esp. from Romney, Kent and; *S. anthraciniformis* Esp. from the downs and the Warren, Folkestone, Kent.

RUSSWURM, A. D. & MIDDLETON, H.—*Sphinx ligustri* L. ab. *albescens* Tutt (Plate II, Fig. 11), Brockenhurst, 28.vi.1993. The aberration also occurred there in 1976 and 1985.

SHARPE, P.—Aberrations of *Deilephila elpenor* L., *Mimas tiliae* L., *Laothoe populi* L., *Lomasipilis marginata* L. (Plate II, Fig. 1) and *Ennomos erosaria* D. & S. *Trigonophora flammea* Esp., Dorset, 10.x.1993, and from larvae found in imported lettuce *Spodoptera littoralis* Boisd. and *Heliothis armigera* Hübn.

SIMMONS, M.—An aberration of *Xanthorhoe fluctuata* L. with the dark median

fascia reduced to a triangle on the costa with its apex just beyond the discal spot, an enlarged subterminal fascia, darker than usual hindwings and all other markings less well defined.

SIMSON, E. C.—Examples of phaeism, usually due to aberration, sometimes to geographical variation.

SKINNER, B.—A series of *Agrochola haematidea* Dup. bred from collected larvae, Sussex, vi.1993; also photographs of larvae, pupae and live adults. *Hadena perplexa capsophila* Dup. from larvae, Inisheer, Aran Islands, viii.1992; *Standfussiana lucerneae* L. from Folkestone, 7.vii.1993; *Meganola strigula* D. & S., Silchester, Hants, 2.vii.1993 and *Agrotis exclamationis* L. ab. *ostrovichi* Diosz. from Addington, Surrey, 16.vi.1993 (orbicular of forewing absent).

SKINNER, B. & ELLIOTT, B.—*Odontognophos dumetata* Treits. from larvae collected in the Burren, Co. Clare in v.1993; photographs of all stages were exhibited, also of a parasite.

STERLING, M. & P.—*Hippotion celerio* L. found in a greenhouse in Coombe Keynes, Dorset, 14.x.1993 by Mr A. Johnson. *Pelosia obtusa* H.-S. from Norfolk, 28.vii.1993 and *Euxoa cursoria* Hufn., Winterton-on-Sea, Norfolk, 28.vii.1993. The first British specimen of *Pardasena virgulana* Mab. (Plate II, Fig. 3), a tropical African species, taken at light, Thorpe-le-Soken, 27.ix.1992.

TOWNSEND, M.—*Aplocera efformata* Guen. ab. with first, third and fourth cross lines absent, Oxford, 11.viii.1993; *Chloroclysta miata* L. two specimens with pinkish-brown streaks, Kirkhill Forest, Aberdeenshire, x.1986; *Biston betularia* L., Harpenden, Herts., 10.vii.1991, ab. with forewings typical and hindwings intermediate; *Orthosia gracilis* D. & S. from Newtown, Powys, iv.1988, both pinkish and dark forms with especially dark hindwings from lowland beside the River Severn where *Myrica* is absent. An asymmetrical ab. of *Orthosia cruda* D. & S.; the first county record of *Spargania luctuata* D. & S. taken at Harpenden, 31.v.1992 and *Rhyacia simulans* Hufn. bred from female taken at Harpenden, 8.ix.1992, the only imago from 200 first-instar larvae, the larva fed on false oat grass when small, on dandelion in final instar.

WARING, P., on behalf of Butterfly Conservation and the Joint Committee for the Conservation of British Invertebrates.—A display explaining the national survey of *Cossus cossus* L., and requesting post-1979 records. Display included photograph of larva, also samples of worked timber, an extruded pupal case and an up-to-date distribution map from the forthcoming atlas of the rarer macro-moths of Great Britain.

WARNE, B.—A melanic *Drymonia ruficornis* Hufn. from Binstead, I.O.W., 15.iv.1992; *Callistege mi* Clerck, Ashey, I.O.W., 26.v.1993, ab. An ab. with pale forewings and dark yellow hindwings of *Pseudopanthera macularia* L., Havenstreet, I.O.W.

WEST, B. K.—*Ligdia adustata* D. & S. ab. *plumbea* Cockayne (Plate II, Fig. 2) from Brockenhurst, Hants, 29.v.1987, only the second recorded specimen; from Dartford, Kent: *Crocallis elinguaris* L. ab. *obviaria* Ljungdahl, 22.vii.1977 and ab. *nigrolineata* Lempke, 4.viii.1988; *Ennomos alniaria* L. ab. *concolor* Lempke, 18.ix.1985 and ab. *destrigaria* Cockayne, 21.viii.1990, apparently the second recorded specimen; *Ennomos fuscantaria* Haw. ab. *juncta* Wize, 9.ix.1988 and ab. *perfusata* Rebel, 4.ix.1988.

WINTER, P.—From North-east Yorkshire (VC62) the first vice-county record of *Eupithecia abietaria* Goeze, North York Moors, 30.vi.1993. From South-east Yorkshire (VC61) *Eupithecia pimpinellata* Hübn., bred from larva on *Pimpinella saxifraga* L. at Muston, 21.ix.1992; a bilateral gynandromorph of *Agrotis exclamationis* L. (Plate II, Fig. 13), Muston, 30.vi.1993; *Lygephila pastinum* Treits., Muston; *Rhyacia simulans* Hufn. and *Apamea furva* D. & S., Flamborough,

10.viii.1993; *Photedes fluxa* Hübn. and *Coenobia rufa* Haw. from Kirkham Abbey, 16.vii.1993.

#### BRITISH MICROLEPIDOPTERA

ALEXANDER, K. N. A. & FOSTER, A. P.—*Epischnia banksiella* Richardson, first north Wales record, 12.vii.1993, Llyn Peninsula, Caer., adult swept in vicinity of *Inula crithmoides* L.

BAKER, P.—*Sclerocona acutella* Evers., Thorpe, Surrey, 13.vi.1989; this is only the second recorded British specimen. A short note will appear in the journal in due course.

BEAUMONT, H. E.—*Luffia ferchaultella* (Steph.), cases common among lichen growing on a grave memorial at Collingham churchyard, Wetherby, Yorks. (VC64), 25.vi.1993 (D. H. Smith), many female moths reared, first Yorkshire record. *Phyllonorycter cerasicolella* (H.-S.), larval mines fairly common in leaves of cherry at Edlington Wood, Doncaster, Yorks. (VC63) 11.x.1992, moths reared mid-March 1993. It is exactly one hundred years ago that this moth was first found in Britain at nearby Wheatley Wood (now destroyed), still the most northerly British locality. There have only been two further Yorkshire records in the intervening years. *Chrysoesthia sexguttella* (Thunb.), two moths were reared in April 1993 from larvae in blotch mines of sea purslane (*Halimione portulacoides* L.) at Spurn, Yorks. (VC61), 26.ix.1992, an unrecorded foodplant. *Stathmopoda pedella* (L.), three previous single records suggested that this moth may be resident in Yorkshire. At Bolton-on-Dearne, Yorks. (VC63), moths were disturbed commonly from alders on 30.iv.1993 and a single moth occurred among alder near West Melton, Yorks. (VC63) on 2.vii.1993. *Ptycholomoides aeriferanus* (H.-S.), Ecclesall Wood, Sheffield, Yorks. (VC63), 3.vii.1993. First VC63 and second Yorkshire record, (previous record from VC61 in 1992). *Lozotaeniodes formosanus* (Gey.) at m.v. light, West Melton, Rotherham, Yorks. (VC63), 8.vii.1993. First VC63 record (previous Yorkshire records were of single moths at three localities in VC61 in 1992). *Epiblema grandaevana* (Lien. & Zell.) Taken in the R.I.S. trap at Spurn, Yorks. (VC61), 9.vi.1993 (B. R. Spence), first VC61 record and the first in Yorkshire since 1909. The date of capture appeared to be very early as previous dated Yorkshire records were all of moths taken in July; however it accords with the dates of moths recorded in Northamptonshire in 1992 (Gardiner & Hilliard, *Entomologist's Rec. J. Var.* 105: 239–40). *Crambus uliginosellus* Zell., a few moths were in a boggy area of Skipwith Common, Yorks. (VC61), 17.vii.1993. A previous record from this locality in 1895 and a single moth at Hatfield Moor (VC63) in 1967 are the only other Yorkshire records. *Evergestis pallidata* (Hufn.), Skipwith Common, Yorks. (VC61), 17.vii.1993. This moth is showing signs of becoming established in Yorkshire with other recent records from Spurn (VC61) and three localities in VC63 in the last two years.

BLAND, K. P.—*Elachista alpinella* Staint. from southern Scotland to show range of variation in intensity of markings and in the size. *E. eskoi* Kyrki & Karvonen, superficially like a large *E. kilmunella* Staint., but has a characteristic smooth grey coloration. It is now known to be quite widespread in Scotland, being recorded from VCs 79,80,81,83,88,95 & 96. The examples were from Camghouran, Rannoch, 19.vi.1977, NN 5656, VC88; Whitelaw Moss, Selks., 3.vii.1981, NT 5028, VC79; Auchencorth, Midloth., 11.vi.1992, NT 2057, VC83 (original British locality). *Cydia tenebrosana* Dup., taken at light 2/3.vii.1993 at Haughend, Angus (NO 5774, VC90); a very local species in Scotland. *Cydia molesta* Busck, reared from larva in a French apple purchased in Edinburgh, Midloth. (VC83), imago emerged 7.vi.1993.

BRADFORD, E. S.—(1) From Sandwich Bay Bird Observatory, all at light traps: *Yponomeuta sedella* Treits., viii.1993; *Oinophila v-flava* Haw., 17.v.1993; *Thisanotia chrysonuchella* Scop., 26.v.1993; *Hypochalcia ahenella* D. & S., 17.vi.1993; *Chilo phragmitella* Hübn., 8.ix.1993; *Anerastia lotella* Hübn., 7.vii.1993; *Pediasia contaminella* Hübn., 31.vii.1993; *Mellisoblyptes zelleri* Joann., 26.vi.1993; *Olethreutes lacunana* D. & S., 25.vi.1993; *Nyctegretis lineana* Scop., 26.vi.1993.

(2) From other localities: *Phycitodes maritima* Tengst., 5.vii.1993, Pean Hill, Whitstable, Kent; *Pexicopia malvella* Hübn., 27.vii.1993, Pean Hill; *Monochroa moyses* Uffen, 27.vi.1993, Pean Hill, *Stigmella samiatella* Zell., 24.v.1992, Pean Hill; *Monochroa moyses* Uffen, 3.vii.1971, Mucking, Essex; *M. lucidella* Steph., 4.vii.1993, Seasalter, Whitstable, Kent; *Adela croesella* Scop., 6.vi.1993, Chilham Down, Kent.

BROTHERIDGE, D.—Specimens nationally rare or new to Wiltshire. *Denisia albimaculea* Haw., 28.vi.1993, Marlborough Downs, VC7, new to county. *Aplota palpella* Haw., 28.vii.1993, Lover, VC8, new to VC. *Acanthophila alacella* Zell., 4.viii.1991, Lover, VC8, new to county. *Epiphyas postvittana* Walk., 21.viii.1993, Wroughton, VC7. *Eucosma conterminana* H.-S., 20.vii.1993, Wroughton, VC7, new to county. *Pediasia aridella* Thunb., 25.vi.1992, Pound Bottom, VC8, new to county. *Pyralis lienigialis* Zell., Wootton Bassett, VC7, 14.viii.1991; near Minety, VC7, 9.viii.1992. *Ancylosis oblitella* Zell., Wroughton, VC7, 10.viii.1992. *Phycitodes saxicola* Vaugh., Wroughton, VC7, 25.vii.1993.

CLANCY, S. P.—Included in the exhibit were six species of Pyralidae: *Eudonia alpina* Curtis, taken at Coylum Bridge, Inv., late May 1993. These are of interest because of the early date involved, the Caledonian Forest habitat from which they were taken and the low altitude at which they occurred (c. 250 m). *Sitochroa palealis* D. & S., a female, perhaps of Continental origin, taken at Dungeness, Kent, 7.vii.1993. *Sciota adelphella* F. R., a short series bred from a female taken New Romney, Kent, 18.vii.1992; this appears to be a species now established in the Dungeness/Lydd/New Romney area. *Agriphila geniculea* Haw., a specimen taken at Lydd, 10.ix.1993, showing dark shading between the median and subterminal fasciae; *Scoparia pyralella* D. & S., a specimen approaching f. *purbeckensis* Bankes from Dungeness on 21.vi.1993; *Homoeosoma sinuella* F., a specimen with the cross-lines unusually juxtaposed, and the area between them shaded with dark scaling, Lydd, 31.vii.1993.

CORLEY, M. F. W.—Interesting Lepidoptera from Oxfordshire and Wiltshire. *Bohemannia auriciliella* Joannis (*Ectoedemia bradfordi* Emmet), Lover (VC8), 24.vi.1993; the third British specimen; otherwise known only from single examples in Brittany and the Netherlands. *Elachista unifasciella* Haw., Knap Hill (VC7), 14.viii.1993. *Caryocolum viscariellum* Staint., Bladon Heath, Woodstock (VC23), 22.vii.1993, new to Oxfordshire. *Acanthophila alacella* Zell., Lover (VC8), 28.vii.1993. *Exapate congelatella* Clerck, Pucketty Farm, Faringdon (VC22), 4.i.1993; thought to have been introduced to the site with trees from a Shropshire nursery. *Hypsopygia costalis* F. ab., Pucketty Farm, Faringdon (VC22), 18.viii.1993.

HARPER, M.—*Mompha bradleyi* Reidl, a species new to Britain. Specimens of this moth were bred from small green galls on *Epilobium hirsutum* L. during late summer of 1991 from several sites in Herefordshire. At the time it was considered to be a new pabulum for the closely related *M. divisella* H.-S., also a gall-feeder on other *Epilobium* species, e.g. *E. montanum* L., *E. palustre* L. and *E. lanceolatum* Sebast. & Mauri. *Mompha bradleyi*, known from central and western Europe had not been recognized as a British species until 1991, although it is likely that specimens exist unrecognized in collections. Galls are seen usually on lateral side shoots just below the flowers, in August and early September. Moths appear in September from pupae within the gall and then hibernate until the following spring and early summer.

Hibernated moths have been seen on the wing in the middle of June, and so far these have all proved to be females. *M. divisella* is probably univoltine; the imagines appearing earlier in July and August and then hibernating through to the following spring. It is difficult to separate the adults of either species on macroscopic criteria reliably, and even the female genitalia of both are very similar and variable. The male genitalia however do show reliable and consistent features separating the two species. Mr J. C. Koster of the Netherlands, suggested that these bred moths might be *M. bradley* Reidl and confirmed their identity.

HECKFORD, R. J.—*Stigmella auromarginella* Rich., Portland, Dorset (VC9), bred from *Rubus fruticosus* agg., 29.vi.1993 (with Dr J. R. Langmaid). *Coleophora siccifolia* Staint., Great Plantation, Devon (VC3), bred from *Sorbus aucuparia* L., 16–22.v.1993, new to Devon. *C. orbitella* Zell., Haldon Hill, Devon (VC3), 23.vii.1993. *Anarsia lineatella* Zell., local shop, Lizard, Cornwall (VC1), bred from nectarine, 14.ix.1993. *Batrachedra parvulipunctella* Chret., Cadgwith, Cornwall (VC1), 18.viii.1991, new to Britain; otherwise known only from Tunisia and Sicily (*B. pinicolella* Zell. shown for comparison). *Acleris umbrana* Hübn., Heybrook Bay, Devon (VC3), bred from *Prunus spinosa* L., 25.x.1992 and 4.vii.1993, new to Devon, and first record of two broods. *Agriphila geniculea* Haw., Kennack Sands, Cornwall (VC1), 26.viii.1993, a form with forewings chocolate brown except the area between the cross lines which was grey (Plate II, Fig. 14). *Homoeosoma nimbella* Dup., St Mary's, Isles of Scilly, Cornwall (VC1), 4.vi.1993.

HENWOOD, B.—*Cydia prunivorana* Rag., Colyton, Devon, at m.v. light, 3.vii.1993. Previously known in Britain only from five specimens from Kent, and a few from Plympton and Colyton, Devon.

HOARE, R. J. B.—(1) From Branscombe, S. Devon. *Stigmella auromarginella* Rich., mines on *Rubus fruticosus* agg. collected 11.x.1992, moths produced early November 1992, new to Devon. *Ectoedemia erythrogenella* Joann., mines on *Rubus fruticosus* collected 11.x.1992, moths produced July 1993, new to Devon. *Trifurcula subnitidella* Dup., two flying near *Lotus corniculatus* L. at about 8 p.m., 7.viii.1993. *Leucoptera lathyriifoliella* Staint., three bred from *Lathyrus sylvestris* L. (mines collected 7.viii.1993), compared with two dwarf specimens bred from *Lathyrus pratensis* L. (mines collected 7.viii.1993). The mines on *L. pratensis* were adjacent to heavily-attacked *L. sylvestris*.

(2) Moths from Portland, Dorset. *Cochylis roseana* Haw., two flying 1.viii.1993. *C. hybridella* Hübn., one flying 29.viii.1993. *Eucosma pupillana* Clerck, one resting on *Artemisia absinthium* L., 1.viii.1993. *Acroclita subsequana* H.-S., two flying 29.viii.1993. *Collicularia microgrammana* Guen., two flying 3.vi.1993. *Capperia britanniodactyla* Greg., three bred from larvae on *Teucrium scorodonia* L. collected 3.vi.1993. *Leioptilus carphodactyla* Hübn., four of many bred from pupae in flower-heads of *Inula conyzia* (Griess.) Meikle, collected 15.viii.1993.

(3) Moths from other localities in Devon. Instow (VC4): *Stigmella anomalella* Goeze, two small black-headed specimens bred from larvae on *Rosa pimpinellifolia* L. collected 15.vi.1993. From unimproved grassland near Exeter University campus: *Isophrictitis striatella* D. & S., *Nemophora minimella* D. & S. and *Dichrorampha consortana* Steph., all taken in the evening, 26.vii.1993. Northernhay Gardens, Exeter: *Glyphipteryx linneella* Clerck, a male and female from lime trunks, 28.vii.1993. Bickton Common, Woodbury (VC3): *Buckleria paludum* Zell., three flying at about 8–8.30 p.m., 3.viii.1993 over boggy heathland.

KNILL-JONES, S. A.—The following all taken at m.v. light at Freshwater, Isle of Wight, unless stated otherwise. *Zelleria hepariella* Staint., 14.vii.1987, new vice-county record. *Crociosema plebejana* Zell., 18.xi.1990, new vice-county record. *Pammene*

*aurantiana* Staud., 27.vii.1992. *P. regiana* Zell., 11.vii.1992. *Udea fulvalis* Hübn., 8 & 11.viii.1993. *Hedya salicella* L., Cranmore, 1 & 2.vii.1993. *Apotomis turbidana* Hübn., Cranmore, 30.vi.1993. *Acleris cristana* D. & S., 30.i & 31.iii.1993. *A. literana* L., Cranmore, two, 21.iv.1993. *Phycita roborella* D. & S., Cranmore, 1.vii.1993. *Hypochalcia ahenella* D. & S., Compton Down, two, 24.vi.1993; Cranmore, 29.vi.1993. *Acrobasis repandana* F., Cranmore, 31.vi.1993. *A. consociella* Hübn., Cranmore, 30.vi & 2.vii.1993. *Capperia britanniodactyla* Greg., Cranmore, 2.vii.1993. Dwarf examples of the following (sizes are wing-spans): *Aphomia sociella* L., 14.vii.1993, 21 mm, *Myelois cribrella* Hübn., 9.vii.1993, 22 mm. *Agriphila straminella* D. & S., 28.vii.1993, 13 mm. *Hypsopygia costalis* F., 2.viii.1993, 12 mm.

LANGMAID, J. R.—*Stigmella auromarginella* Rich., two bred from *Rubus fruticosus* agg. from Overcombe, and one from Portland, Dorset; mines found 12.vi.93 with R. J. Heckford. *Oinophila v-flava* Haw., St Martin's, Isles of Scilly, one taken indoors, 18.ix.1993, with D. J. L. Agassiz. *Caloptilia leucapennella* Steph., a series bred from *Quercus ilex* L. from Tresco, Isles of Scilly, larvae found 20.ix.1993, with D. J. L. Agassiz. *Calybites phasianipennella* Hübn., a series bred from *Rumex acetosa* L., St Mary's, Isles of Scilly, mines found 18.ix.1993, with D. J. L. Agassiz. *Phyllonorycter viminiella* Sirc., a series bred from *Populus tremula* L. (a previously unrecorded foodplant), Havant Thicket, Hants., 11.ix.1992, when mines abundant. *Glyphipterix schoenicolella* Boyd, a series bred from *Juncus bufonius* L., a previously unrecorded foodplant, Hartland Moor, Dorset; foodplant gathered 26.vii.1993; with R. J. Heckford and P. H. Sterling. *Digitivalva perlepidella* Staint., a specimen taken near Steep, Hants., 21.v.1993, new to Hampshire. *Eperneria chaerophyllella* Goeze, two specimens of a very dark form, bred from *Daucus carota* L., Grays, Essex, larvae found 18.vii.1993, with D. J. L. Agassiz. *Coleophora deviella* Zell., one taken Gibraltar Point, Lincs., 22.vi.1993, with P. H. Sterling, new to Lincolnshire. *C. murinipennella* Dup., a series bred from *Luzula multiflora* (Ehrh.) Lej., Laggan, Inv., cases found 27.vi.1992, cases also exhibited. *Agonopterix atomella* D. & S., one bred from *Genista tinctoria* L., North Walney, Cumbria, larva found 26.vi.1993. *Eulamprotes wilkella* L., one taken with the aid of a bee-smoker, Saltfleetby-Theddlethorpe, Lincs., 23.vi.1993, with P. H. Sterling. *Pseudotelphusa scalella* Scop., one taken at m.v. light, Southsea, Hants., 6.vi.1993. *Bryotropha galbanella* Zell., one taken at Glen Quoich, Aber., 1.vii.1993, with R. M. Palmer & M. R. Young. *Gelechia hippophaella* Schrank, one of a series bred from *Hippophaë rhamnoides* L., Gibraltar Point, Lincs, larva found 22.vi.1993, with P. H. Sterling. *Mompha langiella* Hübn., series bred from *Circaea lutetiana* L., Ashurst, Hants., 12.vii.1993, plus a pressed sprig from a large stand of the foodplant all of which was blanched by the larval mines, giving the appearance of the whole area having been sprayed with herbicide. *Olethreutes metallicana* Hübn., series taken at Glen Quoich, Aber., where the moth was abundant on 1.vii.1993, with R. M. Palmer & M. R. Young. *O. lacunana* D. & S., a specimen of the reddish form which is endemic to the Isles of Scilly, St Mary's, 18.ix.1993, with D. J. L. Agassiz. *Epinotia signatana* Dougl., a specimen taken at Botley Wood, Hants., 17.vi.1993. *Epiblema cnicolana* Zell., a specimen taken at Portland, Dorset, 12.vi.1993, with R. J. Heckford. *Cydia cognatana* Barr., a specimen taken at Glen Quoich, Aber., 1.vii.1993, with R. M. Palmer & M. R. Young, first confirmed Aberdeenshire record. *Dichrorampha montanana* Dup., two of a series disturbed from a clump of *Tanacetum vulgare* L., Saltfleetby-Theddlethorpe, Lincs., 23–24.vi.1993, with P. H. Sterling. *Plodia interpunctella* Hübn., a specimen taken at m.v. light, Southsea, Hants., 2.ix.1993.

MANNING, D. V.—Moths new to Northamptonshire exhibited by D. V. Manning, collected by C. Gardiner: *Parachronistis albiceps* Zell., Collyweston Great Wood,

10.vii.1992; *Platytes alpinella* Hübn., Easton Hornstocks NNR, 7.vii.1992. *Spatalistis bifasciana* Hübn., Collyweston Great Wood NNR, 31.v.1992. *Metzneria aprilella* H.-S., Barnack Hills & Holes NNR, 24.vi.1992. *Coleophora* sp.(?), with unusual ornamented abdomen, Easton Hornstocks NNR, 24.v.1992.

MCCORMICK, R. & PENNEY, C.—*Schoenobius gigantella* D.&S. from Stoke Saltings, Kent, 30.vii.1993, (Plate II, Fig. 6).

O'KEEFFE, D.—*Gelechia senticetella* Staud., the second British specimen, taken at Petts Wood, Kent, 23.vii.1992, see *Entomologist's Rec. J. Var.* **105**: 176. *Caloptilia falconipennella* Hübn., Bexley, Kent, six specimens bred ix. 1993—a second Kentish locality for this species. *Nemapogon ruricolella* Staint., Faggs Wood, Ham Street, Kent, a series bred from a small quantity of dead oak sticks collected from the woodland floor, 15.v.1994. *Pammene obscurana* Steph., Dartford Heath, Kent, 6.v.1993, three specimens beaten from birch, with specimens of *P. agnotana* Reb. for comparison.

PARSONS, M. S.—(1) From East Kent: *Coleophora otitae* Zell., Hythe Ranges, 6.vii.1993; *C. saturatella* Staint., Dungeness, 6.vii.1993; *Pempeliella ornatella* D. & S., Folkestone Warren, 7.vii.1993; *Melissoblastes zelleri* Joannis, Greatstone Dunes, 7.vii.1993; *Sciota adelphella* F. R., Dungeness, 24. v.1993; *Capperia britanniodactyla* Greg., Shakespeare Cliff, 27.v.1993. (2) From Richmond Park, Surrey: *Coleophora hemerobiella* Scop., bred 8.vii.1993; *Stathmopoda pedella* L., 25.vi.1993; *Athrips rancidella* H.-S. 23.vii.1993. (3) From Mount Caburn NNR, E. Sussex, *Pempelia obductella* Zell., 8.viii.1993.

PICKLES, A. J. & C. T.—*Donacaula forficella* Thunb., a varied series from the New Forest bogs and showing the dark form described by Fassnidge from this locality. *Pediasia contaminella* Hübn. ab. *sticheli* Constant, a series from the Norfolk Coast where this dark form was found to be frequent this year. *Anerastia lotella* Hübn., a series from the Norfolk Coast including specimens with distinct black dusting on the nervures, similar to those described by Barrett as being taken by G. F. Matthew on the East Coast.

PORTER, J.—Moths exhibited by J. Porter, collected by S. H. Church. An example of the darker New Forest form of *Elophila nymphaeata* L. Also, the rare migrant *Maruca testulalis* Geyer, Swanage, Dorset, 31.viii.1991.

SIMMONS, M. J.—(1) Some pyralid moths from Crowborough, East Sussex. *Agriphila selasella* Hübn., 1.viii.1993; *Evergestis pallidata* Hufn., 31.vii.1992, 1.viii.1993; *Udea prunalis* D. & S., melanic form, 25.vi.1993; *Orthopygia glaucinalis* L., 21.vii.1993; *Pylalis farinalis* L., 12.vii.1992; *Galleria mellonella* L., 14.ix.1991, 31.vii.1992; *Pempelia palumbella* D. & S., 3.vii.1993; *Phycita roborella* D. & S., 6.vii.1993; *Dioryctria abietella* D. & S., 5.vii.1991, 8.vii.1993; *D. mutata* Fuchs, fuscous form, 25.vi.1992; *Acrobasis consociella* Hübn., 31.vii.1993. (2) Some pyralid moths from Norman Bay, East Sussex. *Chilo phragmitella* Hübn., 23.vii.1992; *Cynaeda dentalis* D. & S., 19.vii.1992, 20.vii.1993; *Sitochroa palealis* D. & S., 25.vii.1992; *Ostrinia nubilalis* Hübn., 23.vii.1992; *Ebulea crocealis* Hübn., 25.vii.1993; *Dolicharthria punctalis* D. & S., 19.vi.1993; *Synaphe punctalis* F., 17.vii.1993, 29.vii.1993; *Homoeosoma sinuella* F., 19.vi.1993, 17.vii.1993; *Phycitodes maritima* Tengst., 22.vii.1993.

SKINNER, B.—(1) A specimen of *Sciota adelphella* F. R., bred from a larva taken on white willow (*Salix alba* L.) at Greatstone, Kent, 23.viii.1992; and two others bred from a female taken at New Romney, Kent, in July 1992 by K. Redshaw. Photographs of the egg, larva, pupa, cocoon and live adult were included in the display. (2) A selection of local or aberrant Pyralidae taken during 1993: An extreme melanic *Scoparia ambigua* Treits., Ham Street, Kent, 19.vi (Plate II, Fig. 16). One male

and two female melanic *Donacaula forficella* Thunb., New Forest, Hants, 3.viii. Short series of *Pempeliella ornatella* D. & S., Folkestone Warren, Kent, 7.vii. A short variable series of *Scoparia pyralella* D. & S. which included the whitish forms *alba* Tutt and *ingratella* Zell. all netted at dusk at Dungeness, Kent, 9.vi. An extreme melanic male *Synaphe punctalis* F., Dungeness, Kent, 9.vi. A female *Acrobasis tumidana* D. & S., Pagham, Sussex, 14.viii. A male and female example of the dark fuscous form of *Phycita roborella* D. & S., St Martha's Hill, Surrey, 21.vii. Two melanic specimens of *Elythia nymphaeata* L., New Forest, Hants, 3.vii. Three male and one female *Anerastia lotella* Hübn. showing variable degrees of grey dusting and dark subcostal streak on the forewing, Yarmouth district, Norfolk, 1.viii.

STERLING, D. H., M. J. & P. H.—*Opostega auritella* Hübn., taken at m.v. light, Barton Broad, Norfolk, 29.vii.1993. *Glyphipterix schoenicolella* Boyd, Arne, Dorset, bred in numbers from seeds of *Juncus bufonius* L., not related closely to its only known foodplant, *Schoenus nigricans* L. *Acrolepiopsis assectella* Zell., Barton Broad, Norfolk, 29.vii.1993. *Coleophora serpyllatorum* Her., bred from *Thymus*, Gt Orme Head, North Wales, coll. 17.iv.1993. *Bryotropha umbrosella* Zell., Merritown Heath, Hurn, Dorset, coll. 27.vii.1993. *Cochylis pallidana* Zell., Winterton-on-Sea, Norfolk, coll. 27.vii.1993. *Cnephasia genitalana* P. & M., Winchester VC11, 28.vii.1990; originally misidentified as *C. pasiuana*. *Acleris logiana* Clerck, two bred from *Betula* spinings from Botley Wood, Hants., VC11, 20.ix.1992. *Pediasia fascelinella* Hübn., Winterton, Norfolk, 28.vii.1993. *Mecyna flavalis* D. & S., three at garden m.v. light, Winchester, 1993, the first post-war record for VC11; this follows first recent VC12 specimen exhibited 1988, since when there have been one or two each year. *Homoesoma nimbella* Dup., Winterton, Norfolk, 27.vii.1993, gen. det. *Cnaemidophorus rhododactyla* D. & S., bred from larvae on *Rosa canina* L., collected May/June 1993 in Epping Forest. *Coleophora deviella* Zell., Gibraltar Point NNR, Lincs., 22.vi.1993. *Eulamprotes wilkella* L., Saltfleetby-Theddlethorpe NNR, 23.vi.1993. *Monochroa tetragonella* Staint., Saltfleetby-Theddlethorpe NNR, bred from root of *Glaux maritima* L. coll. 26.vi.1993. *Bryotropha* sp.; considered to be forms of *B. mundella* Dougl., Saltfleetby-Theddlethorpe NNR, Lincs., 23.vi.1993; also included were two from Winterton, Norfolk, 27.vii.1993. *Gelechia hippophaella* Schrank, Gibraltar Pt NNR, Lincs., from larvae on *Hippophaë rhamnoides* L., coll. 22.vi.1993. *Olethreutes lacunana* D. & S., an extreme melanic form, Fir Hill Quarry NR. *Dichrorampha montana* Dup. Saltfleetby-Theddlethorpe NNR, examples on 23.vi.1993.

TUCK, K. R. & YOUNG, M. R.—A record of *Cydia infectiva* Heinrich, from North Aberdeenshire (VC93), exhibited, together with an example of *C. piperana* Kearfott, which has a very similar biology. See *Br. J. Ent. Nat. Hist.* 7: 1–2; 1994.

YOUNG, M. R.—Scarce Scottish Lepidoptera: *Parornix alpicola* Wocke (*P. leucostola* Pel.-Clin.) Invernaver NNR, Sutherland, 1.vi.1993. *Elachista argentella* Clerck, Longhaven, Aber., 4 & 5.viii.1993. *Amphisbatis incongruella* Staint., Dinnet Muir NNR, Aber., 16.iv.1993. *Xystophora pulveratella* H.-S., Tulloch, Strathspey, 5.vi.1993. *Bryotropha galbanella* Zell., Glen Quoich, Aber., 1.viii.1993. *Olethreutes metallicana* Hübn., Glen Quoich, Aber., 1.vii.1993.

#### FOREIGN LEPIDOPTERA

BARRINGTON, R.—Gipsy moth, *Lynantia dispar* L., a bilateral gynandromorph (Plate 1, Fig. 15), bred in 1993 at the United States Department of Agriculture Mass Rearing Station at Cape Cod, Massachusetts. The gipsy moth was introduced into the USA from France in 1888/9 and has become a major forest pest in eastern USA, causing millions of dollars worth of damage each year. The Cape Cod Station has

the capacity to rear half a million moths every six weeks, raised on artificial diet. They are bred to produce a virus which is used as a biological pesticide to control wild populations.

CORLEY, M. F. W.—Recent additions to the Lepidoptera of Portugal: *Zygaena rhadamanthus guichardi* Tremewan, first found in 1985 by K. M. Guichard and described by Tremewan in 1991 (Naumann & Tremewan, *Entomologist's Gaz.* 42: 85–88); it flies in March on a small area of dunes on the west coast of the Algarve. *Cucullia calendulae* Treits. (= *C. wredowi* Costa) were first collected by B. Goater in 1989. The remaining 14 species were all first recorded by the exhibitor, with the exception of *Cupido lorquini* H.-S., which has been reported in the past, but according to Gomez Bustillo and Arroyo Varela, 1981, *Catalogo sistematico de los Lepidopteros ibericos*, all Portuguese records are referable to *C. osiris* Meig. ssp. *pseudolorquini* Vty. Although *Idaea fractilineata* Zell. is recorded for Spain by both Culot and Staudinger & Rebel, it does not appear in Gomez Bustillo & Arroyo Varela, even as a synonym.

*I. fractilineata*, *Euxoa psimythiosa* Boursin, *Agrotis sabulosa* Ramb., *Mythimna joannisi* Boursin & Rungs and *Clytie sancta* Stdgr were all taken on sand dunes. *Afriberina terraria* Bang-Haas has been taken on dunes, but also on rocky coasts; it is probably associated with *Juniperus phoenicea* L. *Bryonicta pineti* Stdgr occurs in coastal pine woods. *Eupithecia limbata* Stdgr, *Acasis viretata* Hübn. and *Nola cicatricalis* Treits. are found in the cork oak woods. *Euxoa temera* Stdgr, *Cucullia calendulae* Treits., *Idaea predotaria* Hartig and *Eupithecia dodoneata* Guen. were all taken in inhabited areas with orchards, gardens and cultivated ground mixed with patches of semi-natural vegetation.

EDMUNDS, H. A.—A small but very interesting collection of Heterocera from the lights of a hotel in Drushia, Cyprus, during a ten-day period in October 1993. Provisional determinations made by B. Goater, pending more critical examination in the future. Syntomidae: *Dysauxes famula* Freyer; Pyralidae: *Agriphila tolli* Bles. 2 males, gen. det. There are several eastern Mediterranean species of the *A. geniculea* group which must be dissected before a proper identification can be made. *Ancylolomia palpella* D. & S.; *A. tentaculella* Hübn.; *Duponchelia fovealis* Zell.; *Endotricha flammealis* D. & S.; *Lamoria anella* D. & S.; Lasiocampidae: *Lasiocampa* sp. close to *L. trifolii* D. & S. but differing in several respects, particularly in underside pattern: nothing in de Freina & Witt, *Die Bombyces und Sphinges der Westpalaearkt* quite resembles it; Geometridae: three species of *Idaea*, all of which require critical examination; *Scopula imitatoria* Hübn., f. *syriacaria* Culot; two puzzling species of *Ennominae* of uncertain genera; *Dyscia c.f. raunaria* Freyer; *Aspitates ochrearia* Rossi; Thaumetopaeidae: *Thaumetopaea solitaria* Freyer; Arctiidae: *Eilema c.f. morosina* H.-S.; *E. c.f. muscula* Stdgr; Noctuidae: *Euxoa temera* Hübn.; *Agrotis trux* Hübn.; *A. crassa* Hübn.; *Xestia xanthographa* D. & S.; *Mythimna punctosa* Treits.; *M. scirpi* Dup.; two, possibly three, species of *Episema*, a single specimen resembling *E. korsakovi* Christ., a male and four females comparable to *E. lederi* Christ. and another male of perhaps a third species; *Leucochlaena* sp. resembling an un-named species illustrated in Hacker, *Die Noctuidae Griechenlands*; *Polymixis canescens* Dup.; *P. serpentina* Treits.; *Atethmia ambusta* D. & S.; *Xanthia cypreago* Hamps.; *Polyphaenis subcicata* H.-S.; *Luperina dumerilii* Dup.; *Spodoptera cilium* Guen.; *Chrysodeixis chalcites* Esper; *Trichoplusia circumscripta* Freyer; *Acontia lucida* Hufn.

ELSTON, H. V.—Two drawers of butterflies taken during a ten-day visit to the Alpes Maritimes in France during the period 12–23.vi.1993. Fourteen species of fritillary were shown, including *Fabriciana niobe* L., *Issoria lathonia* L., *Brenthis hecate* D. & S., *Mellicta athalia* Rott., which was abundant, *M. deione* Gey. and *M. parthenoides* Kef. The commonest butterfly was probably *Aporia crataegi* L., especially at higher altitudes.

GOATER, B.—(a) A series of the reputedly extremely rare noctuid *Victrix agenjoi* Fernandez from Prov. Valladolid, Spain. Over 200 males (Plate 1, Fig. 10) were seen at light and resting on grass stems at night in three localities in which the stony ground was covered with a dense growth of lichens; they were very variable. By searching with a lantern, two brachypterous females (Plate I, Fig. 11) were discovered on grass stems, attended by one or more males. It is believed that the female was previously unknown.

(b) A selection of moths taken during June and July 1993 in the southern half of Sweden and in Denmark, including the following: Zygaenidae: *Zygaena osterodensis* Reiss, including an orange specimen, *Z. viciae* D.&S., *Z. exulans* Hochen. and *Z. filipendulae* L. from Sweden and *Z. minos* D.&S. from Denmark; Sesiidae: *Pennisetia hylaeformis* Lasp. bred from raspberry from several localities in both countries; Tortricidae, including *Cochylimorpha hilarana* H.-S., *Olethreutes bipunctana* F., *O. metallicana* Hübn., *O. olivana* Treits., *Apotomis infida* Hein.; Pyralidae, including *Crambus alienellus* Germ. & Kaul., which was abundant on all the bogs, *Agriphila biarmica* Tengst. and *Pediasia truncatella* Zett., both very local in boggy areas, *Catoptria maculalis* Zett. and *Udea hamalis* Thunb. from spruce forest, *U. decrepitalis* D.&S. from ferny stream-banks and *Eudonia aequalis* Kyrki & Svensson, which was described in 1985 and of which very few specimens are as yet known; Lasiocampidae: *Cosmotriche lunigera* Esp. from spruce forest; Sphingidae: *Hyles gallii* Rott. taken at light in the middle of a dense spruce thicket; Geometridae including *Chloroclysta infusata* Tengst. and *C. latefasciata* Stdr, *Thera serraria* Lien. & Zell., *Rheumaptera subhastata* Nolck. and *R. hastata* L., *Perizoma taeniatum* Steph., *Eupithecia analoga* Djakanov and *E. abietaria* Goeze for comparison, *Arichanna melanaria* L. which was abundant in July in boggy woodland where *Ledum palustre* L. grew, and *Parietaria vittaria* Thunb.; Noctuidae, including very dark *Agrotis vestigialis* Hufn., *Epipsilia grisescens* F. ssp. *septrionalis* Fibiger, *Spaelotis clandestina* Harris, *Cucullia argentea* Hufn., several of which were found at rest on shoots of *Artemisia campestris* L. in Denmark, *Eublemma minutata* F., also from Denmark, and *Sympistis funebris* Hübn. and *S. heliophila* Payk., which fly by day like *Anarta* spp. in the Swedish mountains when the sun shines.

(c) Rare Noctuidae from Spain taken in 1993: *Euxoa psimmythiosa* Boursin (Huelva, May), *Agrotis chretieni* Dumont (Segovia, May), *Agrotis turatii* Standf. ssp. *eumetabola* de Lajonquiere (Teruel, May), *Xestia trifida* F. R. (Valladolid, September), *Cucullia reisseri* Boursin, *ex larvis* on *Verbascum* (Segovia, em. June), *Criophasia albolineata* Blachier (Almeria, May), *Eremochlaena orana* Lucas (Alicante & Almeria, October), *Agrochola pistacinoides* d'Aubuisson (Burgos, September), *Atethmia algerica* Culot (Burgos, September), *Cirrhia aurago* D.&S., a series showing extreme variation (Sierra de la Demanda, Burgos, September), *Apamea sicala* Turati (Zaragoza), with *A. monoglypha* Hufn. for comparison, and all five Spanish species of *Pseudohadena*—*P. commoda* Stdr. (Huesca), *P. mariana* de Lajonquiere (Almeria), *P. roseonitens* Oberth. (Almeria), *P. halimi* Mill. (Huesca) and *P. chenopodiphaga* Ramb. (Huesca).

HALL, N.—(a) Pyralidae from Spain: *Actenia vulpecalis* Rag., two specimens from Puerto de la Mora, Granada, 12–13.vii.1991, apparently new to Europe; *Scirpophaga praelata* Scop., two specimens from the Ebro Delta, Tarragona, 7–8.ix.1992. The exhibitor was grateful to Mr Michael Shaffer for the identifications.

(b) Moths from France and Spain, as follows: *Phyllonorycter comparella* Dup., bred from mines on white, grey and black poplar, July 1988 and July 1993, at Collias, Gard, France, emerging in August of the same year. *Esperia oliviella* F., St Laurent-du-Pape, Ardèche, France, July 1993. *Paracorsia repandalis* D. & S., bred from mullein

collected Sept. 1992 at Valdevecar, Albarracin, Teruel, Spain, emerged June, 1993. *Conistra erythrocephala* D.&S., *ab ovis* two gravid females taken at Arlanzon, Burgos, Spain, May 1993, emerged September.

(c) Moths taken in France in July, 1993. From Col de Vars, Alpes-de-Haute-Provence: *Rhyacia latens* Hübn., *Eurois occulta* L., *Apamea rubrivena* Treits. From Esteng, Alpes Maritimes: *Udea maurinalis* W. P. Curtis (= *itysalis* Walk.), *Zygaena viciae* D.&S., *Z. loti* D.&S., *Ochrolepura celsicola* Bell., *O. signifera* D.&S., *Chersotis alpestris* Boisd., *C. oreina* Dufay, *C. anatolica* Draudt, *Rhyacia latens*, *Eurois occulta*, *Apamea rubrivena*, *Syngrapha ain* Hochenwarth. From St Laurent-du-Pape, Ardèche: *Pyrois effusa* Boisd. From Collias, Gard: *Parahypopta caestrum* Hübn., *Harpyia milhauseri* F., *Hadena luteocincta* Ramb., *Cryphia algae* F. From Forêt de Tavel, Gard: *Parahypopta caestrum*, *Hadena luteocincta*, *Calophasia opalina* Esp. (= *casta* Borkh.). From Grotte de Baumes, Gorges du Gardon, Gard: *Apopestes spectrum* Esp. From Camp des Rochilles, Savoie: *Zygaena exulans* Hochen., *Arctia flavia* Fuess., *Euxoa culminicola* Stdgr., *Chersotis anatolica*, *C. ocellina* D.&S., *C. alpestris*, *Rhyacia latens*, *R. grisea* F., *Xestia ochreago* Hübn., *Polia serratilinea* Treits.

(d) From Arlanzón, Burgos, Spain, May 1993: *Jodea croceago* D. & S., *Lithophane ornitopus* Hufn. (a very dark form).

(e) A display showing variation in *Noctua janthe* Borkh. and *N. janthina* D. & S., the former being the species known to occur in Britain. The two species can be separated fairly confidently on external features, both upperside and underside, but a critical examination of the genitalia is essential to be absolutely certain. A note discussing the value of the various features for distinguishing the two species was provided with the exhibit. Six British, two French and two Spanish specimens were shown.

HOARE, R. J. B.—A selection of microlepidoptera, including Pyralidae and Pterophoridae, collected during an Exeter University field trip to Bourg St Pierre, Valais, Switzerland, 25.vi–8.vii.1993. The species exhibited were as follows. Incurvariidae: *Lampronia rupella* D. & S., Bourg, by day, 1.vii; *Nematopogon robertella* Clerck, Valsorey, 3.vii. Psychidae: *Pseudobankesia alpestris* Hein., male bred from cases collected on a rock-face, Bourg, 27.vi; *Bijugis bombycella* D. & S., male caught at dusk, Bourg, 27.vi. Bucculatricidae: *Bucculatrix(?) absinthii* Gartner, two of several seen flying round *Artemisia absinthium* L., Bourg, 1.vii. Epermeniidae: *Ochromolopis icterella* Hübn., Bourg, two by day, 27.vi; *Cataplectica devotella* Heyd., Bourg, two by day, 27.vi; *Epermenia scurella* H.-S., Bourg, one by day, 27.vi. Oecophoridae: *Schiffermuelleria similella* Hübn., a light and a dark specimen, Bourg, at m.v. light, 27.vi; *Depressaria silesiaca* Hein., two of six bred from larvae on *Artemisia absinthium*, Bourg; *Ethmia funerella* F., two second-brood specimens from larvae on *Symphytum officinale* L., collected at Delle, near Belfort, France, 7.vii. Gelechiidae: *Eulamprotes libertinella* Zell., Bourg, two at dusk, 1.vii; *Teleiopsis bagriotella* Dup., Valsorey, by day, 3.vii; *Chionodes perpetuella* H.-S., Bourg, at m.v. light, 3–4.vii; *Caryocolum interalbicella* H.-S., Valsorey, by day, 3.vii; *Sophrionia semicostella* Hübn., Valsorey, by day, 3.vii; *S. humerella* D. & S., Valsorey, by day, 3.vii; *Acompsia tripunctella* D. & S., Bourg, afternoon, 27.vi. Cosmopterigidae: *Pancalia latreillella* Curt., Valsorey, by day, 3.vii. Scythrididae: *Enolmis acanthella* Godart (*sens. lat.*), one at rest on a wall, Chaumont, France, 7.vii. Tortricidae: *Sparganothis pilleriana* D. & S., Sion, by day, 2.vii; *Eana penziana* Thunb. & Beck., male taken on a rock-face, Bourg, 1.vii, female at m.v. light, 28.vi; *E. argentana* Clerck, two by day, 26.vi: this species was abundant around Bourg; *Apotomis sauciana revillana* Curt., Bourg, by day, 26.vi; *Gypsonoma nitidulana* Lien. & Zell., Valsorey,

by day, 3.vii; *Cydia gemniferana* Treits., Bourg, at dusk, 25.vi; *C. medicaginis* Kuznetsov, Langres, France, by day, 25.vi; *C. succedana* D. & S. F. *asseclana* Hübn., Valsorey, by day, 3.vii. Pyralidae: *Catoptria specularis* Hübn., Bourg, at m.v. light, 27.vi; *C. margaritella* D. & S., Bourg, at m.v. light, 1–2.vii; *Gesneria centuriella* D. & S., male by day, 1.vi, female at m.v. light, Bourg, 4.vii; *Eudonia sudetica* Zell., male and female, Bourg, 25–26.vi; *E. valesialis* Dup., Valsorey, taken in afternoon on glacial moraine, 3.vii; *Metaxmeste phrygialis* Hübn., Bourg, by day, 27.vi and Valsorey, by day, 3.vii; *Pempeliella ornata* D. & S., Bourg, at m.v. light, 26.vi; *Catastia marginata* D. & S., Bourg, by day, 27.vi; *Asarta aethiopella* Dup., Valsorey, by day on glacial moraine, 3.vii; *Panstegia aerealis* Hübn., Bourg, by day and at m.v. light; *Sitochroa verticalis* L., Sion, by day, 2.vii; *Anania funebris* Ström, Bourg, by day, 27.vi; *Udea alpinalis* D. & S., Bourg, 25 & 29.vi, at dusk and at m.v. light; *U. nebulalis* Hübn., Bourg, at m.v. light, 26.vi; *U. rhododendronalis* Dup., Valsorey, 3.vii. Pterophoridae: *Platyptilia tesseradactyla* D. & S., Bourg, at m.v. light, 26.vi.

HOLLINGWORTH, T. S.—A selection of moths taken in southern France, the Pyrenees and Corsica, including several microlepidoptera as yet unidentified. Nearly all were caught in coastal or mountain habitats.

LUCKENS, C.—A selection of butterflies from Europe, captured or bred in 1992 and 1993. (i) Butterflies collected in the Cevennes, Hautes Pyrenees and Drome in late July 1993, including the local species *Agrodiaetus dolus vittatus* Oberth. (Cevennes) and *Agriades pyrenaicus* Boisd. (Pyrenees).

(ii) Three Cretan endemics: *Kretania psylorita* Freyer, *Coenonympha thyrasis* Freyer and *Zerynthia cretica* Rebel, all encountered during a week spent on the island in June 1993, at 1600 m on Mt Ida.

(iii) Black-veined white, *Aporia crataegi* L.: four specimens of the original Kentish butterflies; specimens from different localities in Europe, from low levels in Spain to 1500 m in Switzerland; a series of eight specimens reared from two batches of eggs found on *Crataegus* at c. 1400 m on Mt Chelmos, Peloponnese, Greece. The young larvae were overwintered in an unheated greenhouse but otherwise kept outdoors throughout. The resulting imagines were much larger than normal.

PARSONS, M. R.—A selection of Pyralidae from the Greek island of Paxos, taken in late August 1993, including *Agriphila inquinatella* D. & S., *Ancylolomia tentaculella* Hübn., *Hellula undalis* F., *Pyrausta purpuralis* L., *P. sanguinalis* L., *Anania verbascalis* D. & S., *Udea numeralis* Hübn., *Palpita unionalis* Hübn., *Dolicharthria punctalis* D. & S., *D. bruguieralis* Dup., *Hypsopygia costalis* F., *Pyralis regalis* D. & S., *Therapne obsoletalis* Mann., *Endotricha flammealis* D. & S., *Lamoria anella* D. & S. and *Ephestia? elutella* Hübn.

PING, G. & ROBINSON, G. S.—Dudgeonidae from Borneo. Dudgeonidae is a small family comprising the single genus *Dudgeonea* with nine species. Currently placed in the Cossioidea, dudgeonids resemble cossids but possess an abdominal tympanal organ. The genus is already known from Africa, Madagascar, NE India, W Malaysia, New Guinea and northern Australia, and has now been discovered in Borneo. Little is known of the biology of the group, but the Australian species *Dudgeonea actinias* was reared by F. P. Dodd and his findings were reported by Turner when describing the species. The larvae are stem-borers in *Canthium attenuatum* (Rubiaceae); just before pupation the larva excavates a tunnel to the outside bark, leaving only a thin layer of bark to cover the emergence hole. The pupa is protruded from the emergence hole through this operculum prior to emergence of the adult. Dudgeonids are generally extremely rare in collections. The species exhibited (Plate 1, Figs 12 & 13) was collected by Glenn Ping at m.v. light at the edge of mangrove (*Rhizophora*) forest on the

northern shore of the Brunei River, north Borneo. The female is considerably larger than the male. The species is new to science and is closely related to *D. actinias* Turner from Queensland.

REVELL, R. J.—A selection of moths captured in Europe and Africa, the majority on the British List as rare residents, occasional migrants or species of dubious status. Ctenuchidae: *Syntomis phegea* L. and *Dysauxes ancilla* L. from Slovenia. Geometridae: *Scopula immorata* L. from Valais, Switzerland, *S. nigropunctata* Hufn. from France, *Peribatodes secundaria* Esp. and *Siona lineata* Scop. from Valais. Lasiocampidae: *Malacosoma castrensis* L. from French Pyrenees. Nolidae: *Nola chlamitulalis* Hübn. from SW France. Noctuidae: *Pachetra sagittigera* Hufn., *Eriopygodes imbecilla* F., *Syngrapha interrogationis* L. from Valais; *Athetis hospes* Freyer, *Eublemma purpurina* D. & S., *Acontia lucida* Hufn., *Dysgonia algira* L. from SW France; *Trachea atriplicis* L. and *Valeria jaspidea* de Vill. from France; *Helicoverpa armigera* Hübn. from Namibia.

ROBINSON, G. S., TRUCK, K. R. & SHAFFER, M.—A poster display depicting the compilation of material for a forthcoming *Field guide to the smaller moths of South-East Asia*, to be published in Malaysia by the Malaysian Nature Society early in 1994. The display included samples of text and of the colour and half-tone illustrations. Between 1981 and 1993, collections were made in Nepal, Thailand, W. Malaysia, Borneo (Brunei, Sabah, Sarawak), Sulawesi, Seram and New Guinea by members of staff of the British Museum (Natural History). More than 30,000 specimens were collected and details of host-plants, geographical and altitudinal range, morphology and variation were thus obtained. From over 7000 species obtained, a representative selection of 650 was made to include pest species, common and conspicuous species, representatives of the more diverse genera, and species for which information on life history was available.

Using modern desk-top publishing methods and high-quality camera-ready copy, the book will be made available in SE Asia at an affordable price. It will open up new areas of study in insect diversity by specialists and non-specialists in developing countries and will contribute substantially to awareness of small moths as an important component of tropical ecosystems.

WARING, P.—Two drawers of Sphingidae recorded between January 1981 and March 1983 at Nyany camp, Jonglei Province, southern Sudan. Nyany is an old Dinka cattle-camp some 80 km north of Bor and 10 km east of Jonglei village. It is an area of open grassland about 11 km east of the permanent swamp system of the Sudd, scattered with termite mounds. The few trees and shrubs present are mainly confined to the termitaria. A standard Robinson moth trap with 125 W m.v. bulb was operated most nights from dusk to around 2300 hrs, and nectariferous flowers were searched by day and at dusk. The exhibitor expressed his gratitude to Dr I. J. Kitching of the Natural History Museum, London for help in checking identifications and current nomenclature. The following species were shown. *Agrius convolvuli* L., *Acherontia atropos* L., *Xanthopan morgani* Walk., *Polyptychoides niloticus niloticus* Jordan, *Cephonodes hylas virescens* Wallengren, *Daphnis nerii* L., *Nephele vau* Walk., *N. comma* Hopffer including *F. derasa* Rothschild & Jordan, *N. peneus* Cram. (only seen in Juba, capital city of southern Sudan), *N. accentifera* Palisot de Beauvois, *Hyles livornica* Esp., *Basiotbia medea* F., *Euchloron megaera* L., *Hippotion osiris* Dalman, *H. celerio* L., *H. eson* Cram., *H. balsaminae* Walk., *H. rebeli* Rothschild & Jordan, *Macroglossum trochilus* Hübn (seen near Gilo in the Imatong Mts), *Sataspes infernalis* Westw., a carpenter bee mimic (Plate I, Fig. 14).

## DIPTERA

ALEXANDER, K. N. A. & FOSTER, A. P.—A selection of flies found during the National Trust's biological survey of North Wales in 1993. *Oxycera morrisii* Curt., Pistyll Farm, Lleyn, 27.vii; *O. nigricornis* Ol., Erddig, 28.vi, new to Wales; *O. pygmaea* (Fall.), Mynydd Bychestyn, Lleyn, 13.vii; *O. rara* (Scop.), Big Wood, Erddig, 24.vi; *O. trilineata* (F.), Porth Gwylan, Lleyn, 15.vii; *Vanoyia tenuicornis* (Macq.), Big Wood, Erddig, 24.vi, new to Wales (above all Stratiomyidae); *Dioctria oelandica* (L.) (Asilidae), Dolmelynlllyn, Merioneth, 10.vi; *Scenopinus niger* (Deg.) (Scenopinidae), Big Wood, Erddig, 24.vi; *Microdon mutabilis* (L.) (Syrphidae), Dolmelynlllyn, 9.vi; *Oxyna nebulosa* (Wied.) (Tephritidae), Penmachno, Caerns., 22.vii; *Herina lugubris* (Meig.) (Otitidae), moist soft rock cliffs on Lleyn; *Pelidnoptera fuscipennis* (Meig.) (Phaemyiidae), various woodland sites; *Dictya umbrarum* (L.) (Sciomyzidae), Cregennan, 21.vi; *Tetanocera punctifrons* Rond. (Sciomyzidae), Cregennan, 21.vi.

BALL, S. & MORRIS, R.—An exhibit describing the current state of progress in the Hoverfly Recording Scheme (Syrphidae). The database contains 181,000 records from 1992 10 km squares (out of 2850 containing land in Britain). A provisional atlas is expected to be published by the Biological Records Centre in 1996. Examples of maps, phenology and selected species accounts were shown, illustrated by photographs of flies and their habitats.

BLAND, K. P.—(a) *Cerodontha luzulae* (Groschke) (Agromyzidae), recently recognized as new to Britain, but proving widespread on *Luzula sylvatica* (Hudson) Gaudin: Portmore, Peebles, collected 26.iii.1988, emerged 31.v.1988; Aikieside Wood, Ber., collected 3.iii.1990, emerged 6.vi.1990.

(b) *Botanophila depressa* (Stein) (= *Pegohylemyia oraria* Collin), Malaclete, North Uist, reared from *Suaeda maritima* (L.) Dumort. collected 13.vii.1992, emerged 9–17.v.1993.

CHANDLER, P. J.—(a) A selection of flies collected in 1993 at Dinton Pastures Country Park, with a map of the Park to show the main habitats. *Nigrotipula nigra* (L.) (Tipulidae), remnant water meadow at south end of Mortimer's Meadow, 26.vi; *Sphaeromyias fasciatus* (Meig.) (Ceratopogonidae), common around lakes, v–vi; *Macrocera crassicornis* Winn. (Keroplatidae), hedge south of Black Swan Lake, 21.ix; *Megophtalmidia crassicornis* (Curt.) (Mycetophilidae), on young alders, Tufty's Corner, 23.v; *Chorisops nagatomii* Rozkosny (Stratiomyidae), on oaks south of Black Swan Lake, 21.viii; *Rhamphomyia lamellata* Collin (Empididae), Sandford Copse, 31.vii; *Epistrophe diaphana* (Zett.) (Syrphidae), south end of Mortimer's Meadow, 26.vi; *Euphranta toxoneura* (Loew) (Tephritidae), on sallows in Sandford Copse, 8.v. and by River Loddon, 8.vi; *Oxyna parietina* (L.) (Tephritidae), between lakes 13.vi, and the scarcer *O. nebulosa* (Wied.), same area, 22.vi.1983; *Trigonometopus frontalis* (Meig.) (Lauxaniidae), Mortimer's Meadow, 8.v; *Astiosoma rufifrons* Duda (Asteiidae), at cold bonfire ash at edge of Sandford Copse, 26.vi; *Agromyza ferruginosa* Wulp (Agromyzidae), Mortimer's Meadow, 31.vii; *Gaurax fascipes* (Becker) (Chloropidae), by river Loddon, 26.vi, 8.viii; *Norellia spinipes* (Meig.) (Scathophagidae), on sallows, Mortimer's Meadow, 7.vii; although its food plant (*Narcissus*) is absent from the area; *Piezura boletorum* (Rond.) (Fanniidae), carr at south end of Mortimer's Meadow, 17.vi; *P. graninicola* (Zett.), Sandford Copse, 31.vii, for comparison; *Myopina myopina* (Fall.) (Anthomyiidae), margin of Sandford Lake, 15.viii; *Botanophila gnava* (Meig.) (Anthomyiidae), the lettuce seed fly, frequent in Mortimer's Meadow, vi–vii, where *Lactuca serriola* L. is a possible food plant.

(b) 28 species of snail-killing flies (Sciomyzidae) found at Dinton Pastures, with comments on their biology. In addition to the 3 notable species exhibited by Ian McLean in 1992, *Pherbellia griseola* (Fall.), *Colobaea bifasciella* (Fall.) and *Pteromicra pectorosa* (Hendel) were found in 1993; all 6 notable species were found by Mungell's Pond which supports at least 13 species of the family.

(c) *Homoneura biumbata* (Lowe) (Lauxaniidae), new to Britain from Dinton Pastures: male, 23.v and both sexes, 31.vii, on sallows of small copses on Mortimer's Meadow (females had been found at Brent Reservoir, Middlesex, 22.vi.1991 but hitherto confused with *H. tesquae*); also shown *H. subnotata* Papp and *H. thalhammeri* Papp collected with it on 31.vii; larvae of this genus mine decaying leaves of trees, especially sallows and poplars.

(d) *Sphaeromias pictus* (Meig.) (Ceratopogonidae), new to Britain from Old Slade woods, Bucks., 4.viii.1977 and Old Buckenham Fen, Norfolk, 11.vii.1993; also found at Runnymede ponds, Surrey. The two known British species also exhibited.

(e) *Dynatosoma thoracicum* Zett. *sensu* Landrock (Mycetophilidae), second British specimen, female from Bucklebury Common, Berks., 6.vi.1993; a male was found at the same site by Alan Stubbs, 12.vii.1989; it is very distinctive, entirely orange-bodied with brown-banded wings, but species group needs revision before formal admission to British list.

GODFREY, A.—A selection of uncommon flies collected in 1993. *Ctenophora flaveolata* (F.) (Tipulidae), Bix Bottom, Oxon, 13.iv, male on beech trunk; *Odontomyia angulata* (Panz.), *Stratiomys singularior* (Harris) (Stratiomyidae) and *Eutolmus rufibarbis* (Meig.) (Asilidae), Thompson Common, Norfolk, 6.vii; *Hybomitra expollicata* (Pand.) (Tabanidae), Iwade Marshes, Kent, 24.vi; *Villa modesta* (Meig.) (Bombyliidae), Holkham dunes, Norfolk, 8.vii; *Lejops vittata* (Meig.) (Syrphidae), Iwade Marshes, 24.vi; *Myopites eximia* Séguy (Tephritidae), The Swale, Isle of Sheppey, Kent, 25.vi; *Geomyza breviseta* (Czerny) (Opomyzidae), in tussocky grassland at Dunstable, Beds., 6.x; *Stenomicroa delicata* (Collin) (Aulacigastriidae), on *Carex paniculata* L., Barnby Marshes, Suffolk, 7.vii; *Aecothea praecox* Loew (Heleomyzidae), in rabbit holes at several sites, shown from Risby Warren, Lincs., 29.vi; *Siphonella oscinina* (Fall.) (Chloropidae), Brentwood, Essex, 16.viii; *Dicraeus scibilis* Collin (Chloropidae), The Swale, Isle of Sheppey, 25.vi, frequent in brackish ditches in 1993; *Trixoscelis marginella* (Fall.) (Trixoscelidae), inland sandy path, Rauceby Warren, Lincs., 20.vi.

HALSTEAD, A.—Some local species found in 1993: *Oxycera morrisii* Curt. (Stratiomyidae), wet meadow at Hoe Rough, near Beetley, Norfolk, 6.vii; *Atylotus latistriatus* (Brauer) (Tabanidae), sand dunes, Holkham Bay, Norfolk, 7.vii; *Ogcodes pallipes* Lat. (Acroceridae), edge of meadows north of Calthorpe Broad, Norfolk, 8.vii; *Xylophagus ater* Meig. (Xylophagidae), *in copula* on beech trunk, Abinger Rough, Surrey, 12.vi; *Choerades marginata* (L.) (Asilidae), Foxley Wood, Norfolk, 6.vii; *Myopa tessellatipennis* Mots. (Conopidae), ride of chalk woodland at Therfield Heath, near Royston, Herts., 4.v.; *Melieria picta* (Meig.) (Otitidae), saltmarsh near Titchwell RSPB Reserve, Norfolk, 7.vii; *Ictericia westermanni* (Meig.) (Tephritidae), Sandford Lake, Dinton Pastures, Berks., 25.vii; *Urophora solstitialis* (L.) (Tephritidae), on *Carduus nutans* L. near Hopton Fen, Suffolk, 11.vii; *Pherbellia griseola* (Fall.) (Sciomyzidae), Upton Broad Fen, Norfolk, 10.vii; *Sciomyza simplex* Fall., Catfield Fen, Norfolk, 8.vii; *Dichetophora finlandica* Verbeke (Sciomyzidae), near fresh water lake on Kenfig Burrows, Glam., 27.iv; *Ornithomyia avicularia* (L.) (Hippoboscidae), on collector's arm, Royal Horticultural Society Gardens at Wisley, Surrey, 23.vi.

HODGE, P. J.—Flies found in Sussex in 1993: *Pelecocera trincta* Meig. (Syrphidae), St Leonard's Forest, West Sussex, 31.vii, swept off *Molinia* in heathy

woodland ride, new county record; *Rhingia rostrata* (L.) (Syrphidae), Streatfield Wood near Brede, East Sussex, 27.viii., one female; *Acinia corniculata* (Zett.) (Plate I, Fig. 8) (Tephritidae), Chailey Common, East Sussex, 19.viii, two females swept off *Centaurea nigra* L. in tiny area of unimproved grassland at edge of common (currently known from 3 sites in East Anglia with a few old records scattered in southern England).

MILES, S. R.—*Asilus crabroniformis* L. (Asilidae), from a new site in west Hants.; *Caliprobola speciosa* (Rossi), hovering around very crumbly base of an old beech tree at Bishopsgate in eastern part of Windsor Forest, Berks.

PLANT, C. W.—*Nephrocerus scutellatus* Macq. (Pipunculidae), from M25 Motorway southern embankment, TQ3652, Surrey, Malaise trap, 27.v–13.vi.1993, which produced 1 male and 170 females; another trap 1 km west produced 26 females. Both traps were near areas of oak scrub which it is known to frequent in Europe where it is thought to parasitize froghoppers of the genus *Mesembrius*; only two previous British records of the fly, King's Park Wood, Sussex and Selborne Common, Hants. (both Alan Stubbs), accounting for its RDB 1 status, queried by the exhibitor as many European records were from Malaise traps and it was also possibly nocturnal.

#### COLEOPTERA

ALEXANDER, K. N. A.—Three rare beetles taken in Gloucestershire during summer 1993; all are new localities. *Lissodema cursor* (Gyll.), one from ash woodland on Sedbury Cliff, 15.viii.1993, 2nd county record; *Osphyia bipunctata* (F.), one from hawthorn blossom, Chedworth Woods, 31.v.1993; *Grammoptera ustulata* (Schall.), one beaten from oak foliage, Coombe Hill Canal, 15.v.1993.

ALEXANDER, K. N. A. & FOSTER, A. P.—A selection of the more interesting beetles found during the National Trust's Biological Survey 1993 visit to North Wales. The Border parks of Erddig and Chirk Castle, Denbighshire, and also the seacliffs on the Llyn Peninsula, Caernarvonshire, feature strongly. Those species believed to be new to Wales are marked with an asterisk. *Agabus affinis* (Payk.), Dolmelynlyn Estate, Mer., 9.vi.1993; *Quedius ventralis* (Aragona), from sap-run on horse chestnut, Erddig Park, 28.vi.1993; *Geotrupes vernalis* (L.), one on coastal heathland, Mynydd-y-Graig, Llyn, 16.vii.1993; *Amphimallon ochraceus* (Knoch), frequent at Pen-y-Cil, Llyn, 14.vii.1993, and noted elsewhere on the Peninsula; *Prionocyphon serricornis* (Müller, P. W. J.), swept in Big Wood, Erddig, 24.vi.1993, new to N. Wales; *Sericus brunneus* (L.), Dolmelynlyn, 9.vi.1993; *Malthinus frontalis* (Marsh.), swept in Big Wood, Erddig, 24.vi.1993, the 3rd Welsh record; \**Dorcatoma serra* Panz., one tapped from *Inonotus dryadeus* bracket fungus on old oak at Chirk, 19.vii.1993; *Thymalus limbatus* (F.), from pasture-woodland, Dolmelynlyn Estate, Mer. 9.vi.1993; \**Cryptarcha strigata* (F.), Chirk, 19.vii.1993; *Eledona agricola* (Herbst), abundant in *Laetiporus sulphureus* bracket fungus on old oak, Chirk, 19.vii.1993, new to N. Wales; \**Prionychus ater* (F.), Chirk and Erddig; \**Abdera quadrifasciata* (Curt.), one from dead lower limb of old oak at Chirk, 19.vii.1993; *Donacia thalassina* Germ., Llynau Cregennan, Mer., 22.vi.1993; *Cryptocephalus aureolus* Suff., from seacliff grassland, Trwyn y Ffosle, Llyn, 8.vii.1993; *Sibinia arenariae* Steph., from rock-spurrey, Mynydd Bychestyn, Llyn, 13.vii.1993, new to N. Wales.

BOOTH, R. G.—*Longitarsus longiseta* Weise from a heathy woodland clearing in East Sussex. A single female was swept in 1992; in 1993 numerous examples were found on common speedwell, *Veronica officinalis* L. which is undoubtedly the host plant at this site. Formerly known as British from a single male collected in Kent in 1951 by Mr A. A. Allen who described it in 1967 as *Longitarsus clarus*.

COLLIER, M.—(1) Some notable Norfolk Coleoptera, including four new county records (\*). *Acupalpus consputus* (Duft.), Stanford MOD, 22.ix.1993. \**Perigona nigriceps* (Dej.), Rockland St Peter, 23.ix.1993, in garden compost heap. \**Scydmaenus rufus* M. & K. and \**Scaptia testacea* Allen, Santon Downham, adults found emerged on 29.vi.1993 from rotten alder collected 6.ii.1993. *Tachinus flavolimbatus* Pand., Caudlesprings, Watton, 10.ix.1993, sieving fen/meadow cuttings. *Soronina punctatissima* (Ill.), Surlingham, 4.vii.1993, first modern county record. \**Uleiota planata* (L.), Stanford MOD, 22.ix.1993, under bark of birch log. *Tetratoma desmaresti* (Lat.), Stanford MOD, 10.iv.1992, beating branches of dead standing oak, first modern county record. *Tropiphorus terricola* (Newm.), Stanford MOD, 5.vi.1993, evening sweeping. *Hypera dauci* (Ol.), Stanford MOD, 16.v.1992, pair in cop crawling outside rabbit burrow, near *Erodium*.

(2) French specimens of beetles now considered very rare or extinct in Britain. *Diachromus germanus* (L.) and *Brachinus sclopeta* (F.), Burcin, 18.v.1993, in wet meadow beside reed fen., *Platycerus caraboides* (L.), Forêt de la Cantinière, 19.v.1993, on umbel in forest meadow. *Trichodes alvearius* (F.), Charnay, 14.v.1993, common on roadside umbels. *Hippodamia 13-punctata* (L.), Etang Fontain, St Eloi, 10.ix.1991, sweeping lakeside vegetation. *Acmaeops collaris* (L.), Forêt de la Cantinière, 19.v.1993, on hawthorn blossom in forest clearing. *Agelastica alni* (L.), Grenoble, 17.v.1993, crawling up trunk of poplar.

COPESTAKE, D. R.—Some interesting beetles found during 1993. *Elaphrus uliginosus* F., Luccombe Chine, I.o.W., 24.iv.1993; *Bembidion obliquum* Sturm, Powdermill Reservoir, East Sussex, 21.ix.1993; *Platyderus ruficollis* (Marsh.), Horsell Common, Surrey, 11.viii.1993, under log; *Harpalus melleti* Heer and *H. schaubergerianus* Puel, near Cheam Golf Course, Surrey, 11.viii.1993, in moss; *Badister bullatus* (Schr.), *B. meridionalis* Puel and *B. unipustulatus* Bon., Otmoor, Oxfordshire, 27.x.1993, all three species in same grass tussock; *Odacantha melanura* (L.), Pevensey Level, East Sussex, 15.iv.1993, in reed litter; *Lacon querceus* (Herbst), Windsor, Berkshire, 21.viii.1993, beating oak; *Ampedus cardinalis* (Schiöd.), Windsor, Berkshire, vi.1993, bred; *A. pomorum* (Herbst), Brocton Coppice, Staffordshire, 24.iii.1993, in birch log; *A. nigerrimus* (Lac.), Windsor, Berkshire, 20.ii.1993, in red-rotten oak log; *Ischnodes sanguinicollis* (Panz.), and *Procaerus tibialis* (Boisd. & Lac.), Windsor, Berkshire, 17.v.1993, on hawthorn blossom; *Megapenthes lugens* (Redt.), Windsor, Berkshire, 17.v.1993, in baited trap; *Ischnomera sanguinicollis* (F.) and *Grammoptera ustulata* (Schall.), Windsor, Berkshire, 17.v.1993, on hawthorn blossom; *Chrysolina sanguinolenta* (L.), near Cheam Golf Course, Surrey, 11.viii.1993, in moss; *Platystomos albinus* (L.), Crump's Wood, Little Horsted, East Sussex, 16.iv.1993, in moss; *Brachytarsus nebulosus* (Forst.), Windsor, Berkshire, 3.vi.1993, beating oak; *Otiiorhynchus raucus* (F.), near Cheam Golf Course, Surrey, 11.viii.1993, in moss; *Cathormiocerus myrmecophilus* (Seidlitz), Ecclesbourne Cliff, Hastings, East Sussex, 14.iv.1993; *C. socius* Boh. Red Cliff, Sandown, I.o.W., 24.iv.1993; *Brachysomus echinatus* (Bons.), Oakley Wood, Cirencester, Gloucestershire, 23.v.1993, swept; *Cneorhinus plumbeus* (Marsh.) and *Tanymecus palliatus* (F.), Eype Mouth, Dorset, 12.vi.1993, swept; *Limobius borealis* (Payk.), Huish, Wiltshire, 6.vi.1993, on *Geranium pratense* L.; *Magdalis barbicornis* (Lat.), near Waterperry Wood, Oxfordshire, 8.vi.1993; *Trachodes hispidus* (L.), Crump's Wood, Little Horsted, East Sussex, 16.iv.1993, in moss; *Cryptorhynchus lapathi* (L.), Merthyr Mawr Warren, Glamorgan, 21.v.1993, on poplar; *Acalles roboris* Curt., Crump's Wood, Little Horsted, East Sussex, 16.iv.1993, in moss; *Bagous collignensis* (Herbst), Balmer Lawn, Brockenhurst, South Hampshire, 7.vi.1993, on muddy pond bank; *B. glabrirostris* (Herbst), Pevensey Level, East Sussex, 15.iv.1993, in reed litter;

*Procas granulicollis* Walton, near Rhyader, Radnorshire, 21.iii.1993, in bracken litter; *Orthochaetes insignis* (Aubé), The Crumbles, Eastbourne, East Sussex, 15.iv.1993; *Rhinoncus albicinctus* Gyll., Powdermill Reservoir, East Sussex, 21.ix.1993, sweeping *Polygonum*; *Tapinotus sellatus* (F.), Virginia Water, Berkshire, 3.vi.1993; *Ceutorhynchus hirtulus* Germ., Merthyr Mawr Warren, Glamorgan, 21.v.1993; *Calosirus terminatus* (Herbst), and *Trichosirocalus barnevillei* (Gren.), near Cheam Golf Course, Surrey, 11.viii.1993, in moss; *Sibinia potentillae* Germ., Great Ovens Hill near Wareham, Dorset, 6.vi.1993; *S. sodalis* Germ., Gilkicker Point near Gosport, South Hampshire, 12.v.1993; *Taphrorychus bicolor* (Herbst), Knole Park near Sevenoaks, West Kent, 20.ii.1993, under beech bark.

HACKETT, D.—(1) A detailed record of new sites for *Agrilus pannonicus* (Pill. & Mitt.) discovered in North London during 1993, including a sketch map. Unless otherwise stated the following records are for sightings of emergence holes in oak bark: Hampstead Heath, TQ276863, TQ272876, TQ261874; Queen's Woods, TQ295886, on >25 trees (+adults); Highgate Wood, TQ283887, on >6 trees (+adult); Cherry Tree Wood, TQ276891, on >3 trees; Alexandra Palace Park, TQ300900, on >3 trees; Coldfall Wood, TQ277903, on >3 trees; Arnos Park, TQ296927, on 3 trees; Broomfield Park, TQ305928, on 1 tree; Grovelands Park, TQ308944, on >2 trees; Trent Park, TQ290975, on >1 tree; Monken Hadley Common, TQ262972, on >1 tree; Totteridge Green, TQ250938, on 1 tree. Specimens exhibited were as follows: larva from an oak stump created by coppicing in February 1992 in Queen's Woods, emergence holes were observed in July 1993; Highgate Wood, 27.iv.1993, dead adult from emergence hole; Richmond Park, Surrey, 3.vii.1993, two adults from oak trunks; Queen's Woods, 5.v.1993, four adults reared from bark samples from an oak stump; Queen's Woods, 28.ii.1993, oak bark sample with three emergence holes; Queen's Woods, 25.x.1993, oak trunk rubbing after removal of bark, showing larval galleries.

(2) New site records for *Agrilus sinuatus* (Ol.), mainly from North London. All but one of the following records are based on observations of emergence holes in bark of *Crataegus* species: Tottenham Cemetery, TQ334911, on *C. × levallei* (hybrid) on 6 trees (+adult); Hampstead Heath, TQ276863, TQ261874; Primrose Hill, TQ276838, on 1 tree; junction of Wellesley Road/Chaseley Drive, Chiswick, TQ197783. Specimens exhibited were as follows: Tottenham Cemetery, 5.vii.1993, small branch and bark samples of *C. × levallei* (hybrid) showing larval mines and emergence holes, also a dead adult from an emergence hole; Richmond Park, Surrey, 3.vii.1993, adult beaten off *Crataegus* spp. by M. S. Parsons; bark samples from *Crataegus* spp. at Bookham Common, Surrey and Wellesley Road, Chiswick were also exhibited.

(3) *Prionychus ater* (F.), Richmond Park, Surrey, 3.vii.1993, on damaged hawthorn; *Phloiотrya vaudoueri* Muls., Coldfall Wood, North London, 18.vii.1993, under dead oak bark.

HALSTEAD, A. J.—Some local Coleoptera taken in 1993. *Lampyris noctiluca* (L.), Woodbastwick Fen., East Norfolk, 7–9.vii.1993, malaise trap; *Hyperaspis pseudopustulata* Muls., Horton, South Gower coast, Glamorgan, 24.iv.1993, swept off cliff-top vegetation; *Cteniopis sulphureus* (L.), East Wretham Heath, West Norfolk, 4.vii.1993, swept; *Meloë proscarabaeus* L., Horton, south Gower coast, Glamorgan, 24.iv.1993, crawling on cliff-top turf; *Phytoecia cylindrica* (L.), Sandford Lake, Dinton Pastures Country Park, Winnersh, Berkshire, 19.vi.1993, swept from lakeside vegetation; *Plateumaris braccata* (Scop.), Upton Broad Fen, East Norfolk, 10.vii.1993, swept off *Phragmites*; *Podagricra fuscicornis* (L.), Royston, Hertfordshire, 3.vii.1993, eating garden hollyhock leaves; *Notaris scirpi* (F.), White Swan Lake, Dinton Pastures

Country Park, Winnersh, Berkshire, 5.vi.1993, swept from lakeside vegetation; *Grypus equiseti* (F.), Whiteford Burrows, Gower Peninsula, Glamorgan, 23.iv.1993, swept in boggy meadow; *Hadroplontus trimaculatus* (F.), East Wretham Heath, West Norfolk, 11.vii.1993, on *Carduus nutans* L.; *Xyleborus dispar* (F.), Whatlington, East Sussex, 2.ix.1993, in dead branch of *Elaeagnus angustifolia*.

HAWKINS, R. D.—Two species of Coleoptera taken in Surrey during 1993. *Malthinus balteatus* Suff., Nonsuch Park, Cheam, Surrey, 4.vii.1993, beaten from oak; *Nephus quadrimaculatus* (Herbst), Egham, Surrey, 5.ix.1993, one specimen beaten from a roadside oak.

HEAL, N. F.—36 species of British Coleoptera, mostly from Kent, taken between 1984 and 1993. New species for Kent are indicated with an asterisk (\*). *Bembidion octomaculatum* (Goeze), Powdermill Reservoir, E. Sussex, TQ7920, 3.ix.1993; *Tachys bistriatus* (Duft.), Aldington, E. Kent, TR0638, 15.x.1993; *T. parvulus* Dej., Canterbury, E. Kent, TR1559, 8.vi.1985; *T. scutellaris* Steph., Chetney Marshes, E. Kent, TQ8869, 20.iv.1992; *Perigona nigriceps* (Dej.), Epsom Downs, Surrey, TQ2157, 5.x.1993; *Coelambus nigrolineatus* (von Steven), Aldington, E. Kent, TR0737, 28.xi.1990; *\*Acrulia inflata* (Gyll.), Lamberhurst, W. Kent, TQ6737, 26.ix.1991; *Carpelimus foveolatus* (Sahl.), Oare Marshes, E. Kent, TR0164, 5.iii.1993; *\*C. lindrothi* Palm, Tonbridge, W. Kent, TQ5645, 4.ii.1990; *Achenium humile* (Nico.), Wittersham, E. Kent, TQ8728, 14/19.i.1993; *\*Trichiusa immigrata* Lohse, Higham Marshes, W. Kent, TQ7075, 3.v.1992, first British record; Wittersham, E. Kent, TQ8728, 14.i.1993; Faversham, E. Kent, TR0260, 13.vi.1993; Epsom Downs, Surrey, TQ2157, 6.ix.1993; *Ilyobates nigricollis* (Payk.), Brede, E. Sussex, TQ7920, 3.ix.1993; *Homoeusa acuminata* (Märk.), Bredhurst, E. Kent, TQ8061, 26.iv.1990; *Aphodius lividus* (Ol.), Hoo, W. Kent, TQ8173, 29.vi.1987; *Agrilus sinuatus* (Ol.), Darenth, W. Kent, TQ5672, 6.viii.91/15.vii.1992; *Rhyzopertha dominica* (F.), Aylesford, W. Kent, TQ7459, 1.x.1991/7.iii.1992, bred, ex. rice bran; *Tenebroides mauritanicus* (L.), Faversham, East Kent, TR0161, 22.x/6.xi.1990, 25.iv/8.ix.1991, bred; *Epuraea distincta* (Grim.), Ham Fen, E. Kent, TR3355, 9.vi.1991; *Uleiota planata* (L.), Strood, W. Kent, TQ7368, 11.vii.1988; Leybourne, W. Kent, TQ6959, 8.x.1991; *\*Atomaria scutellaris* Mots., Aldington, E. Kent, TR0737, 28.xi.1990; Northbourne, E. Kent, TR3458, 20.vii.1991; Wittersham, E. Kent, TQ8728, 16.xii.1992; *Triplax lacordairii* Crotch, Ham Street, E. Kent, TQ9835, 30.vi.1990; *Nephus quadrimaculatus* (Herbst), Darenth, W. Kent, TQ5672, 17.ix.1991, 29.vii/14.viii.1992; West Malling, W. Kent, TQ6857, 26.ix.1992; *Platynaspis luteorubra* (Goeze), Darenth, W. Kent, TQ5772, 14.viii.1991; *Corticeus linearis* (F.), Oxshott Common, Surrey, 12.vii.1993; *Mordellistena nanuloides* Ermisch, Hoo Saltmarsh, W. Kent, TQ7971, 21.vi.1989; *Anthicus bifasciatus* (Rossi), Grain, W. Kent, TQ8975, 14.v.91; *Choragus sheppardi* Kirby, Darenth, W. Kent, TQ5672, 6.viii/30.ix.1991; *Brachysomus hirtus* (Boh.), Boxley, E. Kent, TQ7560, 25.ii.1987; Lyminge Forest, E. Kent, TR1051, 20.iv.1990; *\*Sitona puberulus* Reitt., Lamberhurst, W. Kent, TQ6638, 4.x.1991/13.x.1992; *\*Lixus scabricollis* Boh., Grain, W. Kent, TQ8975, 16.viii/13.ix.1987, first British record; *Magdalis memnonia* (Gyll.), Oxshott Common, Surrey, TQ1461, 12.vii.1993; *Cossonus parallelepipedus* (Herbst), Chetney Marshes, E. Kent, TQ8869, 22.v.1991; *Gymnetron villosulum* Gyll., Newington, E. Kent, TQ8665, 22.v.1990; Barnes Cray, W. Kent, TQ5274, 30.viii.1993; *Rhynchaenus populi* (F.), Stodmarsh, E. Kent, TR2260, 14.x.1984; Graveney, E. Kent, TR0363, 6.vii.1986; Lower Halstow, E. Kent, TQ8567, 23.v.1993; *\*R. pseudostigma* Temperè, Chiddingstone, W. Kent, TQ5147, 18.vii.1993; *R. testaceus* (Müller, O. F.), Ham Fen, E. Kent, TR3355, 9.vi.1991.

HOARE, D. I. B.—(1) Seven species of Longhorn beetle (Cerambycidae) taken in Britain during 1992 and 1993. *Rhagium bifasciatum* F. var. *ictericum* Schleicher

(= var. *andreae* Vill.), New Forest, South Hampshire, 3.vi.1992, on beech log; *Grammoptera variegata* (Germ.), Brockenhurst, South Hampshire, 20.vi.1993, swept in woodland ride; *Leptura fulva* Deg., Totton, South Hampshire, 18.vii.1992, on *Cirsium* flower; *L. sexguttata* F., Brockenhurst, South Hampshire, 20.vi.1993, on *Galium* sp. in woodland; *Anaglyptus mysticus* (L.), Lower Ashton, South Devon, 12.vi.1993, on *Allium ursinum* L.; *Acanthocinus aedilis* (L.), Abernethy Forest Sawmill, Easternness, 27.v.1992; *Phytoecia cylindrica* (L.), Tiverton, South Devon, 1.v.1993, on umbellifer stem.

(2) Four species of Longhorn beetle (Cerambycidae) taken in France or Switzerland in summer 1993. *Oxymirus cursor* (L.), Bourg-St-Pierre, Switzerland, 30.vi.1993, in coniferous woodland; *Gaurotes virginea* (L.), Bourg-St-Pierre, Switzerland, 29.vi.1993, on flower; *Monochamus sutor* (L.), Bourg-St-Pierre, Switzerland, vii.1993, in flight; *Oberia oculata* (L.), Langres, France, 25.vi.1993, on *Salix* sp.

HODGE, P. J.—Eleven species of British Coleoptera taken during 1993. Species new to the county of Sussex are prefixed with an asterisk (\*). *\*Ilybius aenescens* Thoms., North Park Wood, W. Sussex, TQ0515, 21.viii.1993, in acidic pond; *\*Limnebius crinifer* Rey, near Bexhill, E. Sussex, TQ71, 24.vii.1993, the second British site; *Gauropterus fulgidus* (F.), Epsom Downs, Surrey, TQ2257, 6.ix.1993, in old straw; *Philonthus corvinus* Er., Bure Marshes NNR, E. Norfolk, TG3316, 5.vii.1993; *\*Trichiusa immigrata* Lohse, Lancing, W. Sussex, TQ1906, 15.v.1993, in cut grass in an old chalk-pit, a recent immigrant now established in south-east England; *Malthodes crassicornis* (Mäklin), Ashted Common, Surrey, TQ1659, 22.v.1993; *\*Mordellistena humeralis* (L.), Copthorne Common, E. Sussex, TQ3239, 17.viii.1993, one on *Angelica* umbel; *Synchita humeralis* (F.), Holme Fen, Cambridgeshire, TL2089, 29.vi.1993, one beaten from dead alder twigs; *\*Apion rubiginosum* Grill, Chapel Common, W. Sussex, SU8228, 14.viii.1993, swept off short herbage; *Sitona waterhousei* Walton, Chapel Common, W. Sussex, SU8228m, 14.viii.1993, swept off short herbage; *\*Mogulones euphorbiae* (Bris.), Chapel Common, W. Sussex, SU8228, 14.viii.1993, two males swept off short herbage.

JAMES, T. J.—A selection of Coleoptera from Hertfordshire, including several species which appear previously unrecorded from the county; these are prefixed with an asterisk (\*). *Hydrochus angustatus* Germ., Broxbourne Wood, 8.viii.1993, in pond; *Cercyon terminatus* (Marsh.), Ashwell, 14.ii.1993, in compost; *\*Aclypea opaca* (L.), Tingley Wood, Pilton, 11.vi.1993, on ground; *Scydmaenus rufus* Müller, P. W. J. & Kunze, Panshanger Park, 7.vi.1992, in rotten pine log; *\*Carpelmus zealandicus* (Sharp), Amwell Quarry, 5.viii.1987, in detritus by lake; *Anotylus insecatus* (Grav.), Ashwell, 11.vii.1988, in house; *\*Stenus niveus* Fauv., Croxley Moor, 19.vii.1992, taken by R. Gade; *Quedius scitius* (Grav.), Panshanger Park, 17.vi.1990, on old oak; *\*Q. xanthopus* Er., Ashwell, 23.iv.1987, in house; *\*Sapedophilus testaceus* (F.), Nuthampstead, 19.v.1986, on rotten beech log; *Chaetophora spinosa* (Rossi), Oxshott Hill, Benington, 2.vii.1990, at roots of mignonette; *Agrilus laticornis* (Ill.), Broxbourne Woods, 4.viii.1991, on young oak; *A. pannonicus* (Pill. & Mitt.), Cowheath Wood, 21.vi.1992, one of several recent Herts. records; *\*Hemicolus nitidus* (Herbst), Danemead, Broxbourne Woods, 4.viii.1991, beaten from scrub; *Tillus elongatus* (L.), Broxbourne Common, 21.vi.1992, on old oak; *\*Pocadius lanuginosus* Franz, Panshanger Park, 20.x.1991, in fungus; *\*Dienerella filiformis* (Gyll.), Baldock, 5.xii.1985, in building; *\*Alphitobius diaperinus* (Panz.), Ashwell, 14.viii.1990, in house; *Lissodema cursor* (Gyll.), Chapmore End, 30.vi.1988, on ground by roadside hedge; *Mordellistena humeralis* (L.), Whippendell Wood, 29.vii.1990, on hogweed; *Ischnomera cyanea* (F.), Northey Wood, Anstey, 28.v.1992, on guelder rose flower; *Phytodecta olivacea* (Forst.), Hertford Heath, 26.vi.1988, on broom; *\*Epirix*

*pubescens* (Koch), Frogmore Gravel-pit, Aston, 25.vii.1986, swept; *Rhynchites longiceps* Thoms., Broxbourne Wood, 21.vi.1992, in flight; *Byctiscus populi* (L.), Broxbourne Wood, 21.vi.1992, on young aspen; \**Apion rubiginosum* Grill, Croxley Moor, 19.vii.1992, on sheep's sorrel; \**A. immune* Kirby, Croxley Moor, 19.vii.1992, on broom; *A. gyllenhali* Kirby, Fox Covert, Therfield, 14.vii.1992, on burdock near chalk grassland; *Hypera adspersa* (F.), Frogmore Gravel-pit, Aston, 10.v.1989, swept; \**Trachodes hispidus* (L.), Danemead, Broxbourne Woods, 4.viii.1991, on bushes; *Microplontus campestris* (Gyll.), Frogmore Gravel-pit, Aston, 29.v.1987, swept; *Platypus cylindrus* (F.), Cowheath Wood, 21.vi.1992, on oak log.

MENZIES, I. S.—Six species of British Coleoptera. *Clitostethus arcuatus* (Rossi), Bookham Common, Surrey, TQ1255, 29.ii.1992, one example by beating holly beneath oak; 14.viii.1992, one beaten from ivy growing on oak trunk; (single examples also taken by Dr R. G. Booth on 7.iii.1992 and 6.iii.1993); *Hylotrupes bajulus* (L.), Ockham Common, Surrey, TQ0858, 3.vii.1993, adult ovipositing on stump of recently felled Scots pine, *Pinus sylvestris* L., a colour print of the beetle was also shown; *Stenostola dubia* (Laich.), Burton Mill-pond, W. Sussex, SU9717, 22.v.1992, adult beaten from an alder; *Macroplea appendiculata* (Panz.), Talkin Tarn, Cumberland, NY5458, 6.vi.1992, adults on alternate-flowered water milfoil, *Myriophyllum alterniflorum* DC., colour prints of the beetle were also shown; *Altica brevicollis* Foud., Stockbridge Down, North Hampshire, SU3834, 18.vi.1993, beaten from hazel; the parasitic fly *Medina luctuosa* (Meig), which was bred from about one-third of the stock of *Altica* kept alive for ovipositing, was also exhibited, fully grown larvae emerged from the dorsal abdominal surface of the adult beetle and the flies emerged within ten days of pupation; *Platystomos albinus* (L.), Wisley Common, Surrey, TQ0659, 1.viii.1993, one example beaten from a sapling birch.

MORRIS, M. G.—Specimens of *Apion* (*Helianthemapion*) *aciculare* (Germ.) discovered by A. P. Fowles in 1992 on the coast of North Wales, (Fowles and Morris, in press, *Entomologist's Mon. Mag.*). It is a flightless species which breeds in the stems of common rockrose (*Helianthemum nummularium* (L.) Miller) and has not previously been recorded from the British Isles.

OWEN, J. A.—Some uncommon British beetles. *Agonum lugens* (Duft.), Loch Gash, Co. Clare, v.1993, in vegetation at the edge of turlough; *Colon angulare* Er., Braemar, South Aberdeen, vi.1993, swept off grass in a garden; *Thanatophilus dispar* (Herbst) and *Aclypea opaca* (L.), Dromore NNR, Co. Clare, v.1993, under stone; *Stenus glabellus* Thom. Scragh Bog, Co. Westmeath, v.1993, in wet moss; *S. kiesewetteri* Rosen., Caragh Lough, Co. Kerry, v.1993, in sphagnum at edge of lough; *Ochtheophilum fracticorne* (Payk.) and *O. jacuelini* (Boield.), Thornham, West Norfolk, iv.82, in tidal debris; *Philonthus furcifer* Renk. and *P. micans* (Grav.), Portumna, Co. Galway, v.1993, in heap of recently cut long grass on the bank of the R. Shannon; *Gabronthus thermarum* (Aubé), Epsom Downs, Surrey, viii.1993, from heap of cut grass; *Atheta* (*Acrotona*) *benicki* Allen, Berrow, North Somerset, iv.1993, from vegetation flooded by high tide; *Gyrophaena williamsi* Strand, A., Wisley, Surrey, ix.1993, in agaric fungus on the ground, ? *Russula* sp., *Selatostomus melancholicus* (F.), Belmullet, Co. North Mayo, v.1993, sandy area on coastal turf; *Atomaria rubricollis* Bris., near Tatsfield, Surrey, xii.1991, shaken out of cut foliage on chalky slope, another example was taken at the same site in i.1993; *Psylliodes luteola* (Müller, O. F.), near Wimborne, Dorset, viii.1993, several swept from the edge of a cornfield; *Crypturgus subcibrosus* Eggers, Hog Wood, West Sussex, xi.1992, from bark of fallen spruce tree.

PARSONS, M. S.—13 species of Coleoptera taken in southern Britain during 1993. *Badister unipustulatus* Bon., Magor Marsh, Glam., 3.ii.1993; *Hydrochus angustatus*

Germ., Richmond Park, Surrey, 30.iv.1993, netted in flight; *Hypocaccus metallicus* (Herbst) and *Baeckmanniolus dimidiatus* (Ill.), Camber, E. Sussex, 30.v.1993; *Trox scaber* (L.), Richmond Park, Surrey, 9.vi.1993, attracted to actinic light; *Cetonia aurata* (L.), Folkestone Warren, E. Kent, 8.vii.1993; *Ctesias serra* (F.), Richmond Park, Surrey, 1.vi.1993, adult at base of old oak; *Lymexylon navale* (L.), Richmond Park, Surrey, 10.vi.1993; *Prionychus ater* (F.), Richmond Park, Surrey, bred from larvae found in red-rotten oak, adult emerged 1.vi.1993; *Mycetochara humeralis* (F.), Richmond Park, Surrey, 21.v.1993, under hawthorn log; *Phloiотrya vaudoueri* Muls., Richmond Park, Surrey, 10.vi.1993; *Prionus coriarius* (L.), Richmond Park, Surrey, 15.viii.1993, found dead under oak log; *Judolia cerambyciformis* (Schr.), Fingle Bridge, Devon, 13.vi.1993.

PLANT, C. W. & WILLIAMS, S. A.—A single example of the very rare histereid beetle *Paralister obscurus* (Kug.), formerly known as *Hister stercorarius* Hoffmann, J., collected by C. W. Plant from a pitfall trap, near Shillingford, North Devon, set between 30.iv.1993 and 5.vi.1993. The trap was set in a gently sloping bare soil site and the beetle was probably attracted by the smell of decomposing insects in the pot, which contained 424 beetles. The last recorded specimen in Britain is from Colyton, South Devon in 1947. A record for London requires confirmation.

SALMON, M.—A specimen of *Drypta dentata* (Rossi), taken in moss alongside a freshwater rill on the undercliff at Eype Mouth, Dorset, in May 1983.

WHITTON, P.—Ten species of ground beetles taken in North Somerset during the 1970s. *Blethisa multipunctata* (L.), Shapwick, ST419411, 21.iv.1976, at the edge of water on soft peat; *Elaphrus uliginosus* F., Shapwick, ST424408, 9.viii.1971, running in sunshine on bank of drainage ditch; *Amara curta* Dej. and *A. praetermissa* (Sahl.), Emborough, ST619505, 17.viii.1976, under stone in limestone quarry; *Anisodactylus binotatus* (F.), Shapwick, ST465451, 23.viii.1976, under lump of peat on dry ground; *Bradycellus sharpi* Joy, Priddy, ST544513, 19.ii.1977, under dead vegetation; *Stenolophus skrimshiranus* Steph., Westhay Moor, ST44, 21.iv.1976, amongst vegetation at the edge of a ditch; *Licinus depressus* (Payk.), Priddy, ST545507, 11.viii.1971 and 2.ix.1976, under stones in grass near old lead mines; *L. punctatulus* (F.), Gurney Slade, ST64, 25.viii.1976, under stone in disused quarry; *Oodes helopioides* (F.), Shapwick, ST419411, 21.iv.1976, on damp peat beside water; and Westhay Moor, ST44, 23.viii.1976, in damp dried-up ditch.

## HEMIPTERA

ALEXANDER, K. N. A.—Two bugs found at Porthysgo, Llyn Peninsula, Caer., 15.vii.1993: *Enoplops scapha* (F.) (Coreidae) and *Chartoscirta cocksi* (Curt.) (Saldidae).

HAWKINS, R. D.—(1) Significant finds of 1993. *Adelphocoris seticornis* (F.) (Miridae), Llangloffan Fen, near Mathry, Pembrokeshire, 10.ix.1993, ungrazed marshy field by river, reserve of Dyfed Wildlife Trust; second record for VC45. *Miridius quadrivirgatus* (Costa) (Miridae), Milford, Surrey, 30.viii.1993, roadside bank of narrow lane, by bridge over new road; an inland record of a normally coastal bug.

(2) Nonsuch Park survey, 1993. This large urban park near Cheam, Surrey, is fringed by derelict farmland under threat of development, and has varied habitats. Recording in 1993 produced a number of local species: *Legnotus limbosus* (Geoffroy) (Cydnidae), 29.viii.1993; *Stygnocoris rusticus* (Fallén) (Lygaeidae), 29.viii.1993; *Deraeocoris olivaceus* (F.) (Miridae), 13.vi.1993, beaten from hawthorn; *Orthocephalus coriaceus* (F.), 4.vii.1993; *Orthocephalus saltator* (Hahn) (Miridae), 23.viii.1993.

HODGE, P. J.—Seven species of Heteroptera found in Sussex during 1992 and 1993. *Nysius senecionis* (Schilling) (Lygaeidae), Holman Wood, near Brede, E. Sussex, TQ7920, 20.ix.1992, one male and one female swept in a heathy woodland clearing; the first British record. *Hallodapus rufescens* (Burmeister) (Miridae), The Coombe, Lewes, E. Sussex, TQ4210, 9.iv.1993, one macropterous male swept off very short downland turf. *Strongylocoris leucocephalus* (L.) (Miridae), Cissbury Ring, W. Sussex, TQ1307, 3.vi.1993, two swept off very short downland turf. *Globiceps juniperi* Reuter (Miridae), St Leonard's Forest, W. Sussex, TQ2130, 31.vii.1993, one female swept from *Molinia* in a heathy woodland ride. *Microvelia pygmaea* (Duf.) (Veliidae), Heath Patch, near Storrington, W. Sussex, SU7822, 1.viii.1993, one example in pond in large sand pit. *Sigara semistriata* (Fieb.) (Corixidae), North Park Wood, near Storrington, W. Sussex, TQ0515, 27.vi.1993, in acidic pond.

JONES, R. A.—Three species of rhododendron-feeding bug from Dulwich Park, London SE21 (VC 17, 'Surrey'). *Kleidocerys resedae* (Panz.) (Lygaeidae), 9.ix.1993; *Stepanitis rhododendri* Horvath (Tingidae), 23.vii and 9.ix.1993, and *Placotettix taeniatifrons* (Kirschbaum) (Cicadellidae), 9.ix.1993.

KIRBY, P.—A selection of interesting Hemiptera taken in 1991 and 1992. *Aradus betulae* (L.) (Aradidae), Strathfarrar, VC96, 22.vii.1992. *Eurydema oleraceum* (L.) (Pentatomidae), Kennack Sands and Cadgwith, W. Cornwall, ix.1992. *Dicranocephalus agilis* (Scop.) (Stenocephalidae), Loe Bar, W. Cornwall, 4.ix.1992. *Dicranocephalus medius* (Muls. & Rey) (Stenocephalidae), Folkestone Warren, E. Kent, 21.v.1991. *Orsillus depressus* (Dallas) (Lygaeidae), Gidea Park, S. Essex, 27.ix.1992, new to Essex. *Megalonotus antennatus* (Schilling) (Lygaeidae), Dogsthorpe Star Brickpit, VC32, v.1992. *Megalonotus dilatatus* (H.-S.) (Lygaeidae), Dungeness, E. Kent, 23.v.1991. *Megalonotus sabulicola* (Thom.) (Lygaeidae), Oxney Road, Peterborough, 7.vii.1992; Bainton Pits, Northants., 9.viii.1992; new to VC32. *Eremocoris podagricus* (F.) (Lygaeidae), Dogsthorpe Star Brickpit, VC32, 24.vii.1992. *Eremocoris plebejus* (Fall.) (Lygaeidae), Strathfarrar, VC96, 22.vii.1993; Tomfat Wood, VC96, 24.vii.1992. *Aphanus rolandri* (L.) (Lygaeidae), Dungeness, E. Kent, 31.v.1991. *Tropistethus holosericeus* (Scholtz) (Lygaeidae), Dungeness, E. Kent, 3.v.1991. *Himacerus apterus* (F.) (Nabidae), macropterous female, Ouse Washes, Welches Dam, Cambs., 4.viii.1992. *Acalypta nigrina* (Fall.) (Tingidae), Tomfat Wood, VC96, 24.vii.1992. *Lasiacantha capucina* Germ. (Tingidae), Predannack, W. Cornwall, 20.ix.1992. *Chlamydatus pulicarius* (Fall.) (Miridae), Strathfarrar, VC96, 22.vii.1992. *Orthotylus rubidus* (Fieb.) (Miridae), Brancaster, E. Norfolk, 7.ix.1991. *Globiceps cruciatus* Reuter (Miridae), Pembrey Forest, Carm., 9.viii.1991. *Lygus punctatus* (Zett.) (Miridae), Fasnakyle, VC96, 20.vii.1992. *Capsus wagneri* Remane (Miridae), Frays Farm, Middx, 26.vii.1991; Langholm, Dumf., 24.vi.1992; Kielder Water, Northumb., 16.vi.1992; all appear to be new county records. *Teratocoris caricis* Kirkaldy (Miridae), Kielder Water, Northumb., 15.vi.1992, new to Northumberland. *Saldula arenicola* (Scholtz) (Saldidae), Dungeness, E. Kent, 21.v.1991. *Saldula opacula* (Zett.) (Saldidae), Cliffe Marshes, W. Kent, 27.vii.1991; Ouse Washes, Cambs., 5.viii.1992. *Hebrus pusillus* (Fall.) (Hebridae), Higham Marshes, W. Kent, 28.vii.1991. *Microvelia pygmaea* (Duf.) (Veliidae), Dartford Marshes, W. Kent, 1.ix.1991. *Agallia brachyptera* (Boh.) (Cicadellidae), Bainton Pits, Northants., 31.vii.1992. *Doratura impudica* Horvath (Cicadellidae), Brancaster, W. Norfolk, 7.ix.1991. *Sagatus punctifrons* (Fall.) (Cicadellidae), Ouse Washes, Cambs., 3.viii.1992, new to Cambridgeshire and the third British record. *Macrosteles frontalis* (Scott) (Cicadellidae), Maxey South Pits, Northants., 9.viii.1992. *Macrosteles quadripunctulatus* (Kirschbaum) (Cicadellidae), Thornhaugh Quarry, Northants., 10.viii.1992; Snettisham, W. Norfolk, 7.ix.1991. *Macrosteles fieberi* (Edw.)

(Cicadellidae), Tomfat Wood, VC96, 24.vii.1992. *Oliarus leporinus* (L.) (Cixiidae), Machynys, Carm., 10.viii.1991. *Trigonocranus emmeae* Fieb. (Cixiidae), Brookfield Plantation, Northants., 23.vii.1991, new to Northamptonshire. *Ribautodelphax pungens* (Ribaut) (Delphacidae), Folkestone Warren, E. Kent, 21.v.1992. *Dicranotropis divergens* Kirschbaum (Delphacidae), Strathfarrar, VC96, 22.vii.1992.

MENZIES, I.—Heteroptera from Surrey. *Aelia acuminata* (L.) (Pentatomidae), examples swept or found in grassy areas on Bookham Common, 27.viii.1990; Downside, Leatherhead, 22.ix.1991, and Epsom Common, 29.viii.1993. *Eurydema oleraceum* (L.) (Pentatomidae), Bookham Common, 23.v.1992, and Ashted Common, 15.vi.1992: observed often in large numbers on both these commons in recent years; though forms with yellow or red markings were most frequent, examples with white markings were also seen. Favoured foodplants were yellow rocket and white garlic mustard. *Sehirus luctuosus* Muls. & Rey (Cydnidae), White Hill, Mickleham, Surrey, 3.v.1992, found in numbers on the ground under plants of forget-me-not on the south of the hill. *Thyreocoris scarabaeoides* (L.) (Cydnidae), White Hill, Mickleham, Surrey, 3.v.1992, found crawling over low plants in a woodland clearing on the south of the hill in company with *S. luctuosus*. *Sciocoris cursitans* (F.) (Scutelleridae), Howell Hill Nature Reserve, Cheam, Surrey, 14.iv.1991, large numbers found congregating gregariously in moss growing amongst grass in a chalky field. *Cimex lectularius* L. (Cimicidae), St Bartholomew's Hospital, vi.1993, found on an outpatient's sleeve. *Oeciacus hirundinis* (Jenyns) (Cimicidae), Wallington, Surrey, x.1993, found by Dr Roger Booth on a windowsill beneath a house martin's nest. *Gonocerus acuteangulatus* (Goeze) (Coreidae): previously found only in the immediate vicinity of Box Hill, usually in small numbers on box, this bug has been found in recent years on both Bookham and Epsom Commons, where box is unknown. Bookham Common; one adult beaten from holly, Hill House Wood, 14.i.1990; examples beaten from oak (one adult), yew (one adult) and hawthorn (two adults, one nymph), Bayfield and Eastern Plain, 27.viii.1990; three nymphs and three adults beaten from hawthorn, Bayfield Plain, 1.ix.1990; two adults beaten from holly beneath mature oaks, Hill House Wood, 6.iv.1991; one adult beaten from aspen, Bayfield Plain, 22.ix.1991; three nymphs, reared to check identity, beaten from hawthorn near Merri's Cottage. Epsom Common: three adults found in the vicinity of the Wells, two beaten from wild rose and one from hawthorn, 29.viii.1993. Colour prints of adults and nymphs of *G. acuteangulatus* were exhibited.

#### HYMENOPTERA

ARCHER, M. E.—A black and white photograph of the early stage in the construction of a social wasp nest by a queen *Dolichovespula media* (Retz.). The aerial nest was about twice the height of a standard match box and was unusual in having two tube-like entrances on its base.

CHANDLER, P. J.—A single male of the chalcid *Spilochalcis xanthostigma* Dalm. collected by sweeping low vegetation in a woodland ride in the woodland fringe bordering the pingo pool area at Foulden Common, Norf., during the Society's field meeting on 8.viii.1992. The only recent previous British record was from Tilford, Surrey, in July 1965 (Fisher, J. P., 1965, *Entomologist's Mon. Mag.* 101: 115), with one definite earlier record being known, from Kings Lynn, Norf., vii.1913. According to Ferrière & Kerrich (1958, *Handbk Ident. Br Insects* 8(2a): 14), it is a parasite of sawfly larvae of the genus *Arge*. The only other British Chalcidinae are three species of the genus *Chalcis*, which parasitize larvae of soldier flies of the genus *Stratiomys*. One

of these, *Chalcis sispes* (L.) collected at Cothill Fen, Berks, on 1.vii.1976, was shown for comparison.

EDMUNDS, H. A.—An unidentified vespid wasp taken at hotel lights on Cyprus on 14.x.1993.

ELSE, G. R. & ROBERTS, S. P. M.—Twenty-two species of aculeate wasps and bees collected on Salisbury Plain, Wilts., in 1991–93. These included the solitary bees *Andrena simillima* (F.), *A. marginata* F. and *Nomada argentata* H.-S., all recorded during July 1993 at Figheldean Down as new to Wiltshire. Further details of the aculeates recorded during this survey will appear in an article to be published shortly in this journal.

GODFREY, A.—A specimen of *Chalcis sispes* (L.) (Chalcididae) taken at Neatscout Marshes, Isle of Sheppey, Kent, on 25.vi.1993. This species parasitizes larvae of *Stratiomys* spp. (Diptera: Stratiomyidae).

HALSTEAD, A. J.—Some local sawflies and aculeate wasps taken during 1993. Cimbicidae: male *Abia candens* Konow collected by M. Howe, 10.vii, at Kenninghall Fen SSSI, Norf. This is the less common of the two British *Abia* spp. and males of *A. candens* are extremely scarce. Tenthredinidae: female *Dolerus taeniatus* Zaddach, swept near a brackish stream, 27.iv, at the north end of Kenfig Burrows, near Port Talbot, Glam.; male & female *Empria candidata* (Fall.), swept from birch, 15.iv, Wisley Common, Surrey; *Allantus truncatus* (Klug), male 7.viii, The Sheepleas, near West Horsley, female 26.vi, White Downs, near Westcott, both swept from chalk grassland in Surrey; female *Pareophora pruni* (L.), on blackthorn flower, 30.iv, river bank at RHS Garden, Wisley, Surrey; *Parna tenella* (Klug), male 4.v and female 29.v, both swept from *Tilia cordata* Miller at Therfield Heath, Royston, Herts; female *Pristiphora quercus* (Hartig) and female *Nematinus acuminatus* (Thom.), both swept from birch scrub, 20.vi, Chobham Common, Surrey; female *Amauronematus crispus* Benson and female *A. mundus* Konow, both swept from *Salix repens* L., 17.iv, Horsell Birch, near Woking, Surrey; *A. histrio* (Lep.) male on *Salix* catkin, 4.iv, Horsell Common, Surrey; female swept 18.iv, Middle Marsh, Dinton Pastures, near Winnersh,

## Plate II. ANNUAL EXHIBITION 1993

1	2	3	4
6	7	5	
8	9	10	
	11		
12	13		
14	15	16	

- 1: *Lomaspilis marginata*, Horton, Northants, vi.1990, P. Sharpe.
- 2: *Ligdia adustata* ab. *plumbea*, Brockenhurst, Hants, 29.v.1987, B. K. West.
- 3: *Pardasena virgulana*, Thorpe-le-Soken, Essex, 27.ix.1992, M. J. Sterling.
- 4: *Athetis hospes*, St Agnes, Isles of Scilly, 14.ix.1993, J. Hale.
- 5: *A. hospes*, Lizard, Cornwall, 26/27.viii.1978, J. Porter.
- 6: *Schoenobius gigantella*, Stoke Saltings, Kent, 30.vii.1993, R. F. McCormick.
- 7: *Scopula marginepunctata*, Ryde, Isle of Wight, 22.v.1993, D. Peach.
- 8: *Chrysodeixis chalcites*, Dungeness, Kent, 19.viii.1993, S. Clancy.
- 9: *Euproctis similis*, Tilshead, Wilts., 29.vii.1993, S. Clancy.
- 10: *Hadena perplexa*, Dungeness, Kent, 30.iv.1993, S. Clancy.
- 11: *Sphinx ligustri* ab. *albescens*, Brockenhurst, Hants., 28.vi.1993, A. Russwurm and H. Middleton.
- 12: *Odontognophos dumetata hibernica*, Co. Clare, viii.1991, P. Forder.
- 13: *Agrotis exclamations*, bilateral gynandromorph, Muston, S. E. Yorks., 30.vi.1993, P. Q. Winter.
- 14: *Agriphila geniculata*, Kennack Sands, Cornwall, 26.viii.1993, R. J. Heckford.
- 15: *Pseudopanthera macularia*, Virginia Water, Surrey, 12.v.1993, P. Baker.
- 16: *Scoparia ambigua*, Hamstreet, Kent, 19.vi.1993, B. Skinner.

Photo: D. E. Wilson



Plate II. ANNUAL EXHIBITION 1993



Berks. Sapygidae: male *Sapyga quinquepunctata* (F.), on sandy ground, 24.iv. Horton, Gower Peninsula, Glam. Sphecidae: female *Philanthus triangulum* F., at its nest site in a sandy bank, 8.viii. Horsell Common, near Woking, Surrey. This is believed to be the first Surrey record this century for this species. It preys on honeybees and has become more widely distributed in southern and eastern England during the last 10 years.

HODGE, P. J.—A specimen of the local pompilid wasp *Aporus unicolor* Spin. taken 15.viii.1993 at Ambersham Common, W. Sussex, SU9119. This species develops as a parasitoid of the purse-web spider, *Atypus affinis* Eichwald, which it locates and paralyzes within the spider's characteristic silken burrow.

MILES, S. R.—Some scarce aculeate Hymenoptera taken in southern England in recent years. Chrysididae: *Chrysis fulgida* L., 25.vi.1988, Aldershot, Hants. When taken in 1988 this was the first UK record for 40 years. It was captured beside nest holes of other aculeates, some of which were being visited by sphecid wasps of the genus *Trypoxylon*, in a young but rotten oak tree on the edge of heathland. Sphecidae: *Crossocerus binotatus* Lep. & Brulle, 9.viii.1991, taken in the eastern, and probably less well recorded, part of Windsor Great Park, Berks. Halictidae: *Halictus confusus* Smith, 10.vii.1991, north west of Aldershot, Hants; *Lasioglossum xanthopum* (Kirby), 6.vi.1991, taken on *Brassica* flowers growing on an old rubbish dump about 1 mile inland at St Merryn, Cornwall. Anthophoridae: *Nomada argentata* H.-S., 9.viii.1986, on field scabious flowers at Croxton Heath, Norfolk. This species is a nest parasite of the bee *Andrena marginata* F, which is frequent at this site. Megachilidae: *Stelis punctulatissima* (Kirby), 4.viii.1990, swept from the herbage along the former railway line in a military training area at Longmoor, near Liss, Hants. This species is a nest parasite of the solitary bee *Anthidium manicatum* (L.)

ORAM, R.—Some aculeate Hymenoptera collected in a Leatherhead, Surrey, garden during 1993. In addition to some unidentified material these were Vespidae: *Vespa germanica* (F.), *V. vulgaris* (L.); Sphecidae: *Ectemnius continuus* (F.), *Cerceris rybyensis* (L.); Andrenidae: *Andrena fulva* (Müller), female and larvae, *A. scotica* Perkins, *A. pubescens* Ol.; Halictidae: *Halictus rubicundus* (Christ); Megachilidae: *Osmia rufa* (L.); Anthophoridae: *Nomada flava* Panz., *N. marshanella* (Kirby).

PLANT, C. W.—A specimen of *Nomada xanthosticta* (Kirby) (Anthophoridae) collected by the exhibitor (det. P. Harvey) 17.iv.1987 at Brandon, Suffolk. This rare bee is a cleptoparasite of the mining bee *Andrena praecox* (Scop.), a relatively widespread species associated with willow, *Salix* spp. on which it is dependent for pollen. The only other recent records for *N. xanthosticta* are Dungeness, Kent 1988; Swindon, Wilts., 1989 and Burbage, Wilts., 1990. Prior to this it was found in Oxfordshire in 1949. The only previous Suffolk record was a single sighting in the previous century. The only record for the adjacent county of Norfolk was also in the last century.

UFFEN, R. W. J.—Some aculeate bees and wasps collected in Hertfordshire 1992–93. Probable first county records collected from sand bunkers on golf courses: male *Andrena barbilabris* (Kirby), 24.v.1993, male *Sphecodes pellucidus* Smith 27.vii.1992 at Therfield Heath, Royston; female *A. barbilabris* (Kirby), worker *Lasioglossum malachura* (Kirby) and female *S. pellucidus* Smith, all 5.vii.1993 at Watford; *L. malachura* (Kirby) was also taken at Letchworth, 28.viii.1993, while a sphecid wasp, female *Cerceris arenaria* (L.) was taken 4.vii.1993 at Watford. Probable first county records from other artificial sandy sites are *Anoplius concinnus* (Dahl.) (Pompilidae), both sexes from a deep sand pit beneath boulder clay, 21–28.viii.1993, Holwell, Hitchin; male *Crossocerus wesmaeli* (V. d. Lind) (Sphecidae), 5.viii.1993, from a quarry spoil bank of pure sand at Parkbury, St Albans. Probable first county

records from gravel heaths are *Andrena fuscipes* (Kirby), both sexes Nomansland Common, Wheathampstead, 18.viii.1992 and Berkhamsted Common golf course (no sand bunkers there), 17.viii.1993. Also shown were examples of the social wasp *Dolichovespula media* (Retz.), male 20.viii.1993, Watton-at-Stone, light and dark workers 15.vii.1993, Welwyn, queen 16.ix.1992 sitting on an empty nest, Nomansland; a male *Anthidium manicatum* (L.) (Megachilidae) taken 15.viii.1993 by Enid Evans in her Berkhamsted garden, apparently the only record in Herts. since 1933.

WALKER, D. H.—A series of a chafer wasp, *Campsomeriella thoracica* F. (Scoliidae), collected in Saudi Arabia, showing both males and females. The latter are about twice the size of the males and differ markedly in appearance. The sexes also differ in their habits; the males frequent flowers while the females patrol areas of short turf. The females somehow locate chafer beetle larvae under the turf and then lay a single egg on the grub. The wasp larva feeds as an ectoparasite on the chafer grub.

#### ORTHOPTERA

CRONIN, A. R.—Three unidentified grasshoppers collected February 1993 in San Pablo in the Phillipines.

MENZIES, I.—Some recently observed sites for the cone-head crickets in north-east Surrey. The short-winged cone-head, *Conocephalus dorsalis* (Lat.): 12.viii.1992 colonies found at three separate sites on Bookham Common; 19.viii.1993 a large colony seen in a relatively dry grassy area on Epsom Common; 22.vii.1990 a small colony observed in a grassy area with *Juncus* and bracken alongside Penn Pond, Richmond Park. The long-winged cone-head, *Conocephalus discolor* (Thunb.): 12.viii.1990 a male observed in grass near Merrit's Cottage, Bookham Common, also a colony has been found on the Western Plain and noted to be thriving in the summer of 1993; 22.ix.1991 a colony at Downside, south of Leatherhead; 21.viii.1993 a small colony in a grassy clearing of Caen Wood, Ashted Common; 30.viii.1993, a single adult male found amongst grass at Howell Hill Nature Reserve, Cheam; 26.viii.1993 a single adult male in a grassy area of Warren Farm field, Nonsuch Park, Cheam.

#### NEUROPTERA

HALSTEAD, A. J.—A single specimen of the widespread but scarce lacewing *Drepanpteryx phalaenoides* (L.) (Hemerobiidae). This was swept at the margin of deciduous woodland and chalk meadow at The Sheepleas, near West Horsley, Surrey, on 7.viii.1993.

#### REPTILIA

WALKER, D. H.—A desiccated specimen of a hatchling hawk-billed turtle, *Eremochelys imbricata*, found dead in sand dunes at Rastanura, Saudi Arabia, in 1986.

#### ILLUSTRATIONS

CLARKE, J.—A series of photographs of an attempt to breed *Bembecia chrysidiformis* (Esp.), including adults, eggs, larvae and pupae. Moths were artificially fed on sugar solution each morning then placed in a cage containing a mature great water dock and the cage placed in direct sunshine. The female began calling as soon